Kālanirṇayam – Determining Ancient Indian Chronology

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Kālanirṇayam

प्रणम्य शिरसा देवं गणनाथं कृपानिधिम् ।

निर्णयं इतिहासस्य करोम्यत्र यथोचितम् ॥

Chapter I : Introduction

Let me begin this work of mine with a quote from Mr. Max Muller, the famous indologist:

> "Every attempt to go beyond and to bring the chronology of the Buddhists and Brahmins into harmony has proved a failure"

With due deference to the learned scholar, I may say that that is no longer the case. I am not a historian; nor can I claim any great knowledge in Sanskrit or astronomy. Yet emboldened by the fact that none of the great scholars who preceded me have come up with a single satisfactory solution for the 'Bimbisara-Shishunaga/Buddha-Mahavira conundrum and that I have, I hereby proceed to give you my views on the subject.

This is not a half-baked attempt to put back Indian history to 3102BC as so many orientalists have tried to do in the past (without success); This is also not a condescending view on ancient Indian history as adopted by some western critics. In contrast, I have made an honest attempt to reconcile the Hindu, Jain, Buddhist and modern chronologies along with the judicial use of astronomical dating. In my humble view, I have succeeded in what I had set out to do. Let me warn my readers that this work is going to be painfully technical but I'll try my best to present it in an interesting and easily comprehendible manner.

But first, I give you a comparative table of ancient India's timeline based on my own conclusions and those generally accepted in history textbooks:

Table I

Comparitive table showing ancient India's timeline

Particulars	Generally accepted	No of years	My findings
Mahavira	BC 539-BC 467	72/72	BC 539-BC 467
Buddha	BC 567-BC 487	80/80	BC 532-BC 452
Bimbisara	BC 543-BC 491	52/52	BC 512-BC 460
Ajatashatru	BC 491-BC 459	32/32	BC 460-BC 428
Shishunagas	?	?/54	BC 388-BC 334
Nandas	?	?/22	BC 334-BC 312
Chandragupta maurya	BC 325-BC 301	24/24	BC 312-BC 288
Bindusara	BC 301-BC 273	28/25	BC 288-BC 263
Ashokavardhana	BC 269-BC 233	36/36	BC 263-BC 227

(For a complete listing of all the dynasties see Appendix I)

It should be evident that the dates advanced by me do not differ much from those accepted by modern historians. Then the question arises, why this effort at all?

To this I say that this effort of mine is for fixing the predecessors of Bimbisara about whom the modern history books are not clear and to bring out a comprehensive view of ancient India as recorded in the Puranic,Buddhist and Jain traditions.

Chapter II : The Bimbisara-Shishunaga imbroglio

All Indian history books begin their story with the magadhan ruler Bimbisara (also called Srenika) who was a contemporary of Buddha and Mahavira. Now, it is a well established fact borne out by Buddhist, jain and hindu records that there existed a mighty magadhan Janapada (empire) even before Bimbisara. But who exactly were his predecessors is a matter of great dispute.

The confusion has risen due to the conflict between the puranic and Buddhist records. A comparative table is annexed hereunder:

Table II

As per Matsya & Vayu puranas			**As per Ceylonese chronicles**		
S.no	King	Reign period(Years)	S.no	King	Reign period(Years)
1	Barhadrathas	1000?	1	?	?
2	Pradyotas	138?	2	Bimbisara	52
3	Shishunaga	40	3	Ajatashatru	32
4	Kakavarna	26	4	Udayin	16
5	Kshemadharma	36	5	Anirudha & Munda	8
6	Kshatraujas	24	6	Nagadasaka	24
7	Bimbisara	28	7	Shishunaga	18
8	Ajatashatru	25	8	Kakavarna/Kalasoka	28
9	Darshaka	24	9	His 10 sons	22
10	Udayin	33	10	Nava nandas	22
11	Nandivardhana	40			
12	Mahanandi	43			
13	Nava nandas	100			

As it is obvious, while the puranas make Shishunaga a predecessor of Bimbisara, the Buddhist records make him his successor. There is a huge discrepancy among the reign years as well. Modern scholars are aligned to either one of the two theories but it is a fact that the mystery seems insoluble.

Herein comes my contribution. The puranas in their current form are obviously corrupted. For they make Pradyota (& his successors) who was a contemporary of Bimbisara precede him. It must be noted that Pradyota,his son Palaka etc. were the rulers of the mighty empire of Avanti with Ujjain as it’s capital, which fact is clearly borne out by Brhatkatha & Buddhist/jain records.

Also,Buddhists state that Shishunaga destroyed the descendants of Pradyota and made Avanti a part of the mighty Magadhan empire. The puranas themselves state that (Vayu & Matsya puranas) Shishunaga defeated the pradyotas and their fame ("hatvA teSAm yasha: kRtsnam shishunAgo bhaviSyati" : see Appendix III-3). Thus, if shishunaga defeated the descendants of Pradyota (who was contemporaneous with Srenika Bimbisara), obviously he (Shishunaga) must have come after Bimbisara as the Ceylonese chronicles state.

However this problem is not insoluble as held by Max Muller. A careful study of the puranas along with the jain & Buddhist records reveals the truth of the matter.

Starting from the year of the Mahabharata war, the puranas give the list of Magadhan,Surya & Chandra vamsha kings. Now, the Barhadrathas (descendants of Jarasandha) are said to have reigned in the magadhan throne after the war. They had their capital at Girivraja (it was Bimbisara who shifted the magadhan capital to Rajagriha as per Buddhist records).
The 22nd king of the line,Arinjaya, was killed by his minister called 'Sunika' as per the puranas. They also go on to state that this Sunika crowned his son to the magadhan throne instead of crowning himself ("sunika: svAminam hatva putram samabhiSekshyati" : Appendix III-2).

Just who was this son of Sunika?
It is here that the puranic readings go corrupt stating that it was Pradyota. They give his descendants & then state that they were defeated by Shishunaga.

But this is definitely faulty as Pradyota's father was Jayasena & his grandfather Mahendravarma, both rulers of Avanti as given in the Brhatkatha Manjari ("mahendravarmaNo naptA jayasena suto nRpa | candi varAn mahAsena: sa candAhvAn nRpo.abhavat ||").

If some were to state that the Avanti ruler Pradyota ,whom I have just mentioned, may be different from the Pradyota given in the puranic list as being the son of Sunika,I give these facts:

a. The successors of Pradyota are given as Palaka & Ajaka in the puranic list – both mentioned in the Buddhist/jain records as the succesors of Pradyota of Avanti. The Brhatkatha also states that Pradyota Mahasena of Avanti had the sons Gopalaka & Palaka (apart from a daughter Vasavadatta). Bhasa's play 'Swapnavasavadatta' also conforms this fact. Shudraka's play 'Mricchakatika' states that the ruler of Avanti at the time of the play was 'Palaka'. Thus putting these facts together we know that Avanti's Pradyota was succeeded by his son 'Palaka'. Thus the puranic Pradyota & the Avanti Pradyota must be one and the same.
b. Again, the puranas state that Pradyotas reigned at Avanti, when the last of Barhasdrathas was killed("bRhadratheSvatIteSu vItihotreSvavantiSu" : Appendix III-2). Thus it is established beyond doubt that the puranic pradyota is none other than the Pradyota Mahasena of Avanti.

Clearly his father was not 'Sunika' but 'Jayasena' and his family(Vithihotras) had been in power at Avanti for a long time.

So the question to be answered is :

Who was the son of Sunika, who killed Arinjaya (the 22 nd & last barhadratha) ?

To answer this, let us compare the dynastic lists of Surya, Chandra & magadha vamshas as given in the puranas.(See appendix II).

Contemporaneous with the 22nd magadhan king Arinjaya who was killed by Sunika were:
a. Chandravamsha – Vatsa kingdom with Kaushambi as the Capital, 23rd Shatanika & Shatanika's son (24th) Udayana.

b. Suryavamsha – Kosala Kingdom with Saketa(Ayodhya) as the Capital : 22nd Prasenajit & 23rd Kshudraka.

Now, Buddhist & jain records are agreed that Bimbisara's contemporaries were Prasenajit of Kosala & Shatanika of Vatsa kingdom. This is confirmed by Brhatkatha, which states that Shatanika's son Udayana married Vasavadatta, the daughter of Pradyota of Avanti. Putting all this together, we get that :

a. Shatanika of Vatsa , Prasenajit of Kosala & Pradyota of Avanti were all contemporaries of the 23rd magadhan king- the mysterious son of Sunika.
b. But it is a historical fact that Magadha was ruled by Srenika Bimbisara at the time of the above 3 kings.

Then it follows that the elusive son of Sunika is none other than Srenika Bimbisara : this is my conclusion & in my mind it is well justified.

To elucidate futher, look at the 'nAmasAmya' ie., similarity of the names:
Sunika vs Srenika (Bimbisara), his son Kunika(Ajatashatru).
We can see that all these names end with 'nika', showing the possibility of their genetic relationship. Further Bimbisara is said to have been crowned at the age of 15. This is in consonance with the puranic statement that Sunika crowned his son.

Though Buddhist records omit Darshaka(son of Ajatashatru), his historicity is established by Bhasa's play 'Swapnavasavadatta' & by the Brhakatha – both make Darshaka a younger contemporary of Pradyota, ruling from Rajagriha – a city made capital by Srenika Bimbisara. Darshaka was succeeded by Udayin who, as per the puranas, built the city of Kusumapura(Pataliputra) in the 4th year of his reign.
Though even the Jain records omit Darshaka, they indirectly acknowledge him as having preceded Udayin.[Explained in Chapter VI].

Now, by identifying Srenika Bimbisara with the son of Sunika, a major mystery in Indian history has been solved. But all the questions have not been answered.

Who were the successors of Udayin ?

The Buddhist story of generations of parricides is baseless and not supported either by the Jain records, Brhatkatha or puranic chronicles. So reconciling the Buddhist and puranic chronology we may summarise that Udayin was succeeded by his minister Shishunaga and that it was he who defeated the descendants of Avanti's Pradyota and attained great fame.

This supposition is supported by the comparative study of the puranic dynastic lists(Appendix II).

24^{rd} king after the Mahabharata war in Vatsa kingdom was Udayana & 5 kings succeeded him- the last & 28^{th} being Kshemaka.
Similarly in Avanti, Pradyota was succeeded by 4 rulers ending with 'Avanti vardhana'.
The Kosala king Prasenajit(22^{nd}) was also succeeded by 4 kings,the last being 'Sumitra'.

Thus we can see that after the time of Bimbisara, each of these lines had about 4 kings after which they were destroyed. Now, the puranas themselves state that the kings of other lines like the Ikshvakus(surya vamsha) existed till the time of Shishunaga. They also state that Shishunaga defeated the Avanti Pradyotas.

Therefore Shishunaga must have probably been the 4^{th} ruler in Magadha to come after Srenika. We of course have 3 kings – Kunika Ajatashatru,Darshaka & Udayin following Srenika. So it fits that if Shishunaga was the 4^{th} ie., after Udayin, he would be contemporaneous with Avantivardhana etc. This in mind is proof enough to conclude that Shishunaga,the minister of Udayin succeeded him in the magadhan throne. He must have annexed all the major kingdoms of his time – Avanti,Vatsa & Kosala too. His son as per both puranic & Buddhist accounts was Kakavarna.

Here again there is a discrepancy between the Hindu & Buddhist lists. The puranas include two kings Kshemadharma & Kshatraujas as the succesors of Kakavarna shaishunagi. On the other hand, the Buddhist list includes two kings Aniruddha & Munda after Udayin. But their list is definitely flawed. This is shown by the following facts:

a. A 'Nagadasaka' is supposed to have reigned for 24 years after Aniruddha & Munda. This Dasaka can be identified with the puranic 'Darsaka' who is also said to have reigned the same number of years.
b. It is known that Udayin built the city of Pataliputra in his 4^{th} year and shifted the capital from Rajagriha. From Brhatkatha & Bhasa's 'Swapna vasavadatta' we know that Darsaka ruled from Rajagriha & Pataliputra finds no mention. Hence he definetly preceded Udayin. This is confirmed by the puranaic order of kings.(See Table II above).
c. Also, as mentioned earlier, Avanti Pradyota is said to be an elder contemporary of Darshaka.

All these & the ghastly story of generations of parricides discredits the order given in the Ceylonese chronicles.

Identifying Aniruddha & Munda with Kshemadharma & Kshatraujas of the puranas, they can be said to be the succesors of Kakavarna shaishunagi. Again, the Buddhists include 10 sons of kakavarna giving them 22 years. But there is no mention of the 10 sons of kakavarna in the puranas. Moreover the term given to them is the same as that of the succeeding nandas [Actually this additional 22 years had been included to fill up the gap of 170 years between Ajatashatru & Changragupta Maurya – details in Chapter VI].So omitting them & clubbing Nandivardhana,Mahanandi and the nava nandas under one head, we get the following list:

1. Barhadrathas
2. Srenika Bimbisara (Son of Sunika)
3. Kunika Ajatashatru
4. Darshaka
5. Udayin (Most probably Darshaka's younger brother)
6. Shishunaga
7. Kakavarna
8. Kshemadharma & Kshataujas(Aniruddha & Munda of the Buddhists)
9. Nandas

Then, of course came the famous Chandragupta Maurya helped by his great mentor & minister Kautilya Vishnugupta Chanakya.

What is the proof that the above is correct? What are their reigning periods as those given in the puranas & Buddhist records vary so widely?

Herein we must look into the jaina angle & take into account their traditions. Before going on to the same, it must be remarked that the puranic regnal years cannot be entirely correct. They have been modified so as to artificially arrive at the the figure of 1500 ;

Barhadrathas – 1000 years
Pradyotas - 138 years
Shishunagas - 362 years
Total 1500 years.

In this manner they arrive at the figure of 1500 as the gap between the Mahabharata war & Nandas' coronation. Why ?
Herein lies the next great controversy in Indian history – the gap between the Mahabharata war & the Nanda dynasty.

Chapter III : The Great Gap controversy

Some western indologists are of the opinion that in ancient India , no eras/epochs were used and that they were invented and introduced only by Aryabhatta in AD 499. But this is disproved by:

1. The inscription of Kharavela of Kalinga(about BC 165) which mentions a canal built in the year 103 of Nanda(probably by Ashoka) renovated during his time by Kharavela. Now, the puranas state that Mahapadma Nanda ruled as an ekacchatra (emperor who ruled the entire country under one royal umbrella). This is attested by the fact that Tamil sangam poetry also mentions the wealth of the Nanda kings. So it is clear that the nandas ruled over a large territory & that the Nanda era was probably started by them.
2. All the puranas give their dynastic lists commencing from the Mahabharata war(Yudhishtira shaka). Certainly these lists were compiled before the time of the Chandra Gupta I as they(Guptas) have been summarily dispensed with as rulers over a small region.

From the above it is clear that there must have been current atleast these 2 eras (ie) the Mahabharata era & the Nanda era in ancient times and it is these 2 epochs that have been linked up with a verse occurring in almost all the major/ancient puranas.

The problem is, there are numerous readings of the verse giving:

1. 1500 years – Vishnu purana
2. 1050 – Vayu purana
3. 1015 – Matsya purana
4. 1115 – Bhagavata purana
5. 1150 – Bhagavata purana(another reading)

Obviously only one among them can be correct. Which is it ?

It cannot be 1500 because :

1. Sapta rishi cycle : The puranas aver that the saptarishi constellation moves at the rate of one star in a 100 years, completing the cycle in about 2700 years. However it is an astronomical fact that this constellation is stationary. But this theory of the puranas is useful in determining the gap between the Yushishtira shaka & the Nanda shaka.
The bhagavata states that:

'tenaita Rsayo yuktAs tiSThantyabda shatam nRuNAm | te tvadiye dvijA: kAle adhunA cAshritA: maghA: ||'
"Those(Sapta) rishis stay 100 years in each star. They are in your (Parikshit's) time,just now,joined with the Magha-star" Bhagavata (XII,2-28)

'yadA maghAbhyo yAsyanti pUrvASADhAm maharSaya: | tadA nandAt prabhRtyeSa kalir vRddhim gamiSyati ||'
"when the rishis in Magha-star pass on to Purvashadha-star, then on,from Nanda's time,Kali will grow(ie worsen)" Bhagavata (XII,2-32)

From magha to purvashada (including magha) is 11 stars.So approx time span from war date to the nandas is 11*100 = 1100 years. So the gap could not have been 1500 years.
[Parikshit was the grandson of Arjuna & the son of Abhimanyu. He was born in the year of the Mahabharata war & was crowned in the 36th year after the war].

3. The figure of 1500 years has been arrived at by artificially making the Pradyotas,who were contemporaries of Bimbisara, precede him as demonstrated in the previous chapter. So 1500 years gap is a chronological impossibility.

Thus the pata(reading) 1500 cannot be correct. Assuming it to be correct, unscrupulous interpolators altered the puranas to arrive at the figure of 1500 by giving 1000,138 & 362 years repectively to Barhadrathas,Pradyotas & the Shishunagas. The sooner this is discarded, the better.

It follows that the gap between the 2 epochs must be either 1050 or1015 or 1115 or 1150.
Which one is it? Can it be confirmed by other means?

Before I answer these questions, we must get into the Jaina angle mentioned by me towards the close of the previous chapter (Chapter II).

Chapter IV : The Jaina angle

The 'sheet anchor' of Indian History is undoubtedly the date of Chandra gupta Maurya who with the help of Kautilya, overthrew the tyrannic nandas and became the ruler of the mighty magadhan empire. He successfully defended the country from Seleucus Nicator – a general of Alexander the great & the conflict ended in a peace treaty with Chandragupta marrying Seleucus's daughter. Historians are generally agreed in placing him in BC 322.

The jains,on the other hand are unanimous in placing his coronation 255 years before the Vikara samvat ,ie., BC 312 (255+57BC).
This is considered too late a date by historians on the evidence of Magas of Cyrene(BC 285? – BC 258?) mentioned as a contemporary in Ashoka's Edict XIII.

Ashoka's date of BC 269 to BC 233 is arrived at as follows in the modern history text books :
(Pg 116 of Sathianathier's Ancient Indian History,1969)

" method of arriving at Ashoka's initial regnal date is to start from the probable date of Rock edict XIII, which mentions Antiyoka(Antiochos Theos of Syria,261-246BC), Turamaya(Ptolemy Philadalphos of Egypt,285-247BC), Antikina(Antigonos Gonatas of Macedonia,278-239BC), Maga(Magas of Curene,285?-258BC) and Alikasundara (Alexander of Epirrus,272-258?BC,or Alexander of Corinth till BC 244). Obviously these rulers are referred to in a way which leaves no doubt that they were alive whenRack edict XIII was published. Therefore the date of this rock edict must lie between 261 and258, or allowing some time for foreign news to reach India, between 260 or 259 and 257 or 256 BC, and could not be later than BC 256. Ashoka conquered Kalinga in his eight regnal year(expired) and the next four years witnessed his spiritual activity, according to his own statement. Consequently the 14 rock edicts were probably issued about his thirteenth regnal year. Thus this regnal year may be equated with 256 BC and his coronation(from which his regnal years are counted) assigned to 256+13=BC 269."

Now, as seen from the above:

1. As pointed out in the above extract itself, it is not 100% certain that all the kings referred to were indeed alive when the edict was published. After allowance of time for the foreign news(of Death) to reach Pataliputra, the above omits to take into account the time that would be required for the edict's message to travel to corners of the large empire from Pataliputra after necessary bureaucracies & the time taken to actually publish the edict. So even if the news of the death of Magas is assumed to reach Pataliputra in 2 years, just about that time the edicts may have been dispatched for publication & the time taken for it to travel to it's destination & it's actual publication, might have taken another year or two. Or ,even if the message of Magas's death had reached just before the dispatch of the edict, the emperor(or his officials) might have considered it unnecessary to reword the edict.

2. The death of Magas of Cyrene cannot be stated with 100% certainty.It could be a couple of years later too. In fact some historians have placed Magas between BC 300 to BC 250. If better evidence is found for an alternate date for Ashoka, it must be accepted.

Now, Chandragupta Maurya's date is arrived at as follows:

Assuming Ashoka was coronated in BC 269(arrived as above) and using the reign periods as given in the Ceylonese & puranic records :

Chandragupta Maurya - 24 years
Bindusara – 28 years
Gap – 4 years
Ashoka – 36 years.

Therefore, the date of accession of Chandragupta Maurya = BC269+4+25+24 = BC 322.

The puranas, however, do not mention the 4 year gap between the end of Bidusara's rule and Ashoka's coronation. Mr.V.A.Smith holds this view :

> The puranas unanimously give the total reign period of the Mauryas as 137 years. However the sum of the regnal years of the individual kings given in the Vayupurana comes to only 133 which is 4 years lesser than 137. So this must be the 4 year gap left out in the puranas.

With due regard to Mr.Smith's pioneering work and scholarship, I disagree with his conclusion. While, as he mentions, the individual reigns given in Vayu purana adds up to only 133 out of 137, the number of kings therein is only 9. The Vishnu & Bhagavata puranas clearly state that there were 10 Mauryan kings. Hence one king & his reign period is left out in the Vayu purana.The name of a 'Shalishuka' (mentioned in the Vishnu purana & attested by the Yuga purana) has been left out. In fact in one of the printed editions of the Vayupurana,the following note in Sanskrit is added :
"bhaviteti shlokArdhAt prAk shlokArdham patitam" – "the half-shloka preceding the half-shloka starting with 'bhavitA' has fallen/been lost."

This is appended to the verse giving the reign period of the Mauryan king Devavarma.Thus Shalishuka must be the King left out in the Vayupurana & the 4 years difference must be assigned to him. Since the puranas themself make no mention of a gap between Bindusara & Ashoka, the above conclusion is more plausible.

From the above discussion, it is clear that the date adduced to the coronation of Chandra gupta Maurya (BC 322) is not final & unshakeable.

Let us now see what happens if we accept the Jain date of BC 312 for his coronation and use the puranic regnal years:
Chandragupta Maurya – 24 years – BC 312 to BC 288
Bindusara – 25 years – BC 288 to BC 263
Ashokavardhana – 36 years – BC 263 to BC 227

Is is evident that the date arrived for Ashoka's coronation by taking together the Jain & Puranic evidence differs only by 6 years from the generally accepted date(BC 269-BC 263).

Still, many may not be convinced of the dates given above & of the need to revise the accepted dates. Some additional and conclusive proof is necessary to accept the dates I have advanced. This is sought to be achieved in the succeeding chapters.

Chapter V : The Supposition

The readers might wonder what happened to the question of the gap between the Yudhistira shaka & tha Nanda shaka mentioned towards the end of the III Chapter. Well, both the issues – the great gap & the one raised in the previous chapter are sought to be answered here by using the popular mathematical method of supposition.

Let us, for the moment, 'suppose' that the date BC 312 as supported by the jain records for the accession of Chandragupta Maurya is correct.

With this date as the basis, let us reconstruct the predecessors & successors of this monarch bearing in mind the chronology put forth by me in chapter II.

Since the regnal years given in the puranas are corrupted as demonstrated earlier, we shall use the Ceylonese records for this purpose.(See chapter II, Table II). However the list & names of the kings are as given in the puranas – reconstructed at the end of chapter II.

Thus we get :

Table III

1	Srenika Bimbisara	BC 512 to BC 460	52 years
2	Ajatashatru	BC 460 to BC 428	32 years
3	Darshaka	BC 428 to BC 404	24 years
4	Udayin	BC 404 to BC 388	16 years
5	Shishunaga	BC 388 to BC 370	18 years
6	Kakavarna	BC 370 to MC 342	28 years
7	Kshemadharma & Kshatraujas	BC 342 to BC 334	8 years
8	The Nandas	BC 334 to BC 312	22 years
9	Chandragupta Maurya	BC 312	

(The complete list is given in Appendix I)

The above list, based on BC 312, is the conjectural chronology offered by me after reconciling the Puranic, Jain & Buddhist records.

Let us move on to testing this hypothesis.

Chapter VI : The Two Monks test

You have guessed it right. The two monks are none other than Mahavira & Buddha who were contemporaries.

The dates of Buddha & Mahavira are far from settled. The dates generally accepted in history books are:
Buddha : BC 567 to BC 487
Mahavira : BC 539 to BC 467

The point of controvery : The Buddhist pali canons clearly mention that Mahavira died before Buddha.Those canons mention this not just in passing but go on to state that a split amongst the jaina monks happened soon after the death of Mahavira and that this evoked Buddha to give instructions to his disciples.

So the above dates are untenable. Some add 10 years to the jain date of BC 467 and make the death of Mahavira fall in BC 477 on the grounds that the jaina date of Chandragupta Maurya's coronation(BC 312) is 10 years late. Even then, Buddha would have predeceased Mahavira - which is not the case in reality.

Thus, either the date of Buddha or that of Mahavira is faulty; or both, as the case may be.

First, a summary of the traditions regarding Mahavira's period :

1. Mahavira lived for 72 years.

2. Hemachandra, an erudite jain scholar says that Chandragupta Maurya was crowned 255 years BV(before Vikrama Samvat) and that the gap between that date & Mahavira's nirvana was 155 years.
This implies that:
Chandragupta coronation : 255+57BC = BC 312
Mahavira's death : 155+312BC = BC 467

3. Merutunga, a jain monk, mentions the same date (BC 312) for Chandragupta Maurya but gives the gap between that date and Mahavira's nirvana as 215 years.
This implies that:
Chandragupta coronation : 255+57BC = BC 312
Mahavira's death : 215+312BC = BC 527.

4. Jain authorities state that Mahavira died in the 16^{th} regnal year of Kunika Ajatashatru ruling from Champa(a place).

Now, the last mentioned is an independent statement of fact. But (2) & (3) above are clearly in conflict.
Is the date of Mahavira's death BC 467 or BC 527?
In other words, was the gap 155 or 215 ?

On the following 2 grounds I hold that the date given by Hemachandra is the correct one :

1. Jainacharita of the Kalpasutra mentions it's compilation 993 years after Mahavira died and it's public recital, after it's completion, before Dhruvasena I of Valabhi. As he ascended the throne in AD 526, Mahavira's nirvana is placed in BC 467 (AD 526-993). The jain Bhadreshvara also mentions the above date for mahavira's nirvana.
2. Ceylon's Buddhist chronicles give:
   The gap between Chandragupta Maurya's coronation and Ajatashatru's coronation as 22+22+8+28+18+16+24+32 = 170 years (refer Table II in Chapter II).

   a.The gap between these 2 rulers as per Hemachandra:
   155+16 = 171 years [due to point (4) above]

   b. The gap between these 2 rulers as per Merutunga:
   215+16 = 231 years [due to point (4) above]

   We can see that only Hemachandra's figure agrees with the Buddhist records.

From the above it can be established that Mahavira's demise occurred in BC 467. Since he lived for 72 years, his period would be:
Mahavira : BC 539 to BC 467 (as BC 467+72 = BC 539)

Proceeding to Buddha, the traditions recorded are:

1. Buddha lived for 80 years.

2. Ceylonese Buddha shaka = BC 543. Therefore Buddha lived between BC 623 and BC 543.

3. The gap between Ashoka's coronation and Buddha's parinirvana is 218 years.

4. Buddha died in the 8^{th} regnal year of Ajatashatru.

Here too, the last mentioned (pt 4) is an independent statement of fact.

(2) above cannot be correct because Buddha & Mahavira were contemporaries and I have established that Mahavira lived between BC 539 & BC 467. But Mr.Smith accepts the Ceylonese date of BC 623-BC 543 for Buddha and Merutunga's BC 599-BC 527 for Mahavira and maintains that they were contemporaries. But the Merutunga's date rests on flimsy grounds as pointed out earlier and even if these dates were accepted, still the blunder of making Buddha die before Mahavira is not vitiated. Hence these dates are to be rejected.

Taking (3) above to be correct and assuming the date of Ashoka's coronation to be in BC269, the modern date of Buddha is arrived as follows:

BC 269+218 = BC 487.

This is the date accepted by present historians. This date is said to be supported by Cantonese dotted records. But this is no means certain and again the same flaw of making Buddha predecease Mahavira persists.
So there is a need to re-look Buddha's nirvana date, the date of Mahavira being already firmly established by tradition to be BC 539 – BC 467.

Now, point (4) in both the above summaries(of Mahavira&Buddha) are seemingly in direct conflict. This is because Mahavira is said to have died in the 16th regnal year of Ajatashatru whereas Buddha in his 8th regnal year. So on first look it appears that this is counter to the fact that Mahavira died before Buddha. But that is not the case.

The jains mention the rule of Ajatashatru at Champa and not Rajagriha(the capital of the Magadhan empire).As pointed out by some historians already, the 16th regnal year mentioned by the jain records must be dated from the year of taking over of the vice-royalty of Champa and not the throne at Rajagriha.Whereas, the 8th regnal year as given by Buddhist canons must have been counted from Ajatashartu's assumption of the Magadhan throne at Rajagriha. If this is accepted (& seems to be most likely), the contradiction is solved.

But how long before ascending the throne at Rajagriha did Ajatashtru crown himself at Champa?

If this question is solved, Buddha's date can be fixed with certainty.

Herein comes the question of the length of the reign of Srenika Bimbisara,father of Ajatashatru.

The Buddhists give him 52 years. The puranas – 28 years.

Let us assume for the moment that after the 28th regnal year of Bimbisara, Ajatashatru took over Champa and that after the balance number of years ie., 52-28 = 24 years, Ajatashatru ascended the throne at Rajagriha.

In our conjectural chronology (Chapter V), Bimbisara came to power in BC 512.

So splitting his reign period of 52 years into two, we get :

I 28 years (mentioned in the puranas) : BC 512 to BC 484 : Bimbisara in complete control
II 24 years (Buddhist 52 – puranic 28) : BC 484 to BC 460 : Bimbisara at Rajagriha & Ajatashatru at Champa
Later, Ajatashatru at Rajagriha with complete control : 32 years : BC 460 to BC 428.

[Note that the Vayu purana gives Bimbisara 28 years and Ajatashatru 25 years, the total being 53 years which differs by just one year from the Buddhist figure of 52 years of Bimbisara. It, however, mistakenly gives Ajatashatru's individual reign period of 32 years, as evidenced by the Ceylonese chronicles, to Udayin as 33 years.**]**

This would imply that Mahavira's death = 16th year from BC 484 = BC 484-16 = **BC 468**! This is as good as the date BC 467 established by other proofs earlier! This in

itself is an independent confirmation for the accuracy of the conjectural chronology offered by me.

Again, the date of Buddha's demise will be : 8^{th} year from BC 460 = BC 460-8 = **BC 452. This accords with the tradition that Mahavira died before Buddha.**

Now, a confirmation for the above date of Buddha comes from unexpected quarters – the Bhavishya purana!

It must be noted that the Rajanukirtan portion of the Bhavishyapurana,in its present form,is highly corrupted and was most probably composed during the Rajput period as it alludes to the story of Paramaras & other Rajput clans emerging from sacrificial fire. The genealogies given there are also hopelessly garbled and are of no use for historical purposes.They have no connection with those recorded in the other major puranas & found to be correct on various grounds.

However, some valid information can be extracted even from that distorted list. For instance Vikarmaditya is made to live in the first century before Christ & Shalivahana in the first century after Christ. Though the geneology offered for them is historically absurd, their respective dates have been given based on extant eras (Vikrama & Shaka) and hence are correct [Detailed discussions on Vikaramaditya ,Shalivahana & the shakas can be found in Chapter XIII].

Same must be the case with Chandragupta Maurya & Gautama Buddha.
The Bhavishya purana says this:
(Summarised extract)

"Sage Kashyap begot Gautam who was Hari incarnated. Gautam introduced Buddh religion and reigned for 10 years. His son Shakya Muni ruled for 20 years and then his son Shuddhodan ruled for 30 years. Shuddhodan's son was Shakya Singh.He came to the throne at the elapse of 2,700 years of kaliyug. This king was the destroyer of Vedic religion. He ruled for 60 years and converted everyone into Buddhism. Shakya Singh's son was Buddh Singh who ruled for 30 years. Buddh Singh's son was Chandra-gupta, who married a daughter of Suluva, the Yavana king of Pausasa.He ruled for 60 years.His son Bindusar ruled for 60 years. Bindusar's son was Ashoka"

From a reading of the above,2 facts are painfully obvious :

1. The geneology given is utter nonsense;
2. Since kali year 2700 is mentiond, it was definitely written after Aryabhatta introduced the artificial astronomical epoch of BC 3102 [More on this subject in Chapter VIII].

Nonetheless, the traditional dates of Chandragupta Maurya and Buddha seem to be preserved here.

Thus, the date of CG Maurya comes to : (BC 3102 – 2700) - 60 - 30 = BC 312.
This is exactly the date give to him by the Jains!

The date of Buddha's demise comes to : (BC 3102 – 2700) + 30 + 20 = BC 452.
This is exactly the date arrived above based on the conjectural chronology!

This is too much of a co-incidence to be untrue!

Hence I am justified in assuming that the 52 year reign of Bimbisara should be split as 28 & 24 years.

Since Buddha live for 80 years, his period would be :
Gautama Buddha : BC 532 to BC 452 (BC 452 + 80 = BC 532)

Further more, there is another indirect confirmation for this date. It is obtained by the statements of the Hindi poet Chand.

While trying to reconcile(unsuccessfully) the divergent dates of Mahavira offered by Merutunga & Hemachandra, he speaks of 2 vikrama eras:

a. The sananda Vikrama era of BC 57, the normal era and
b. an ananda Vikrama era commencing 90 years later ie., in AD 33

He tries to justify Merutunga's gap of 470 years(215+255) as against 410(155+255) of Hemachandra by suggesting that Merutunga's 470 years should be counted from the ananda vikrama era of AD 33 & not from the normal vikrama epoch of BC 57.
This would give the date of Mahavira's demise as BC 437(AD 33 – 470).
This is 30 years later than the established date of BC 467 and is not supported by any other proof . Hence it is to be discarded.

However the existence of 2 vikrama eras with a gap of 90 years is gathered from this.

Now, the Ceylonese date of Buddha nirvana is BC 543.
The date as determined by me is BC 452.
Mark that the difference amounts to 91 years which is as good as 90 years = the gap between the normal and ananda vikrama eras. So it would not be too farfetched to assume that the chroniclers of Mahavamsa & Dvipavamsa mistakenly applied the Vikrama era of BC 57 instead of the ananda vikrama era which began in AD 33, thereby giving rise to this 90 years difference.

Thus, I feel justified in placing Buddha & Mahavira as follows:

Mahavira : 72 years : BC 539 – BC 467 : 16th year from BC 484 : Kunika Ajatashatru at Champa
Gautama Buddha : 80 years : BC 532 – BC 452 : 8th year from BC 460 : Kunika Ajatashatru at Rajagriha.

Darshaka-Udayin problem solved:
Some historians question the propriety of placing King Darshaka after Ajatashatru & before Udayin on the grounds that both Jain and Buddhist records omit his name – notwithstanding his mention in the Puranas, Brhatkatha and Bhasa's SwapnaVasavadatta. The above categorization of Ajatashatru's reign solves the problem once and for all.
Early Jain sutras state that Ajatashatru(crowned at Champa), ruled for '80 years' and that he was succeeded by Udayin.

As shown here, Ajatashatru at Champa = BC 484.
BC 484 – 80 = BC 404 = The beginning of Udayin's reign as accepted here too!
(See Appendix I)

In other words, the jain texts have clubbed together, the reigns of Ajatashatru and Darshaka thereby arriving at the figure of 80 years. Even after including Darshaka, as accepted here, Udayin comes to power in BC 404 = 80 years after Ajatashatru was crowned at Champa! Most probably both Darshaka and Udayin were sons of Ajatashatru and Udayin must have followed his brother to the Magadhan throne.Therefore there is no need to question either the order of the kings given here or the historicity of King Darshaka.

Such an amazing co-incidence of the dates and records of Hindus, Jains and Buddhists is obtained only if we take BC 312 as the date of coronation of CG Maurya. No other date, either BC 322 or otherwise, would give such a result.

Hence the chronology proposed in Chapter V has been proved to be accurate by mutually confirming facts.

A far more stunning revelation is yet to come.

Chapter VII : The Two-way confirmation

The table of supposition in Chapter V ,as confirmed by the previous chapter , gives us the date of coronation of Srenika Bimbisara as BC 512.(See Appendex I). Now, it has already been shown that Srenika was none other than the son of Sunika who overthrew last barhadratha Arinjaya.

Though, to arrive at the figure of 1500 years (See chapter III), the barhadrathas have been assigned a total of 1000 years in the puranas, the individual reigns of the 22 kings of that line given in the Vayu purana adds up to **937 years** (See Appendix III-1) only.[No king has been left out here as in the case of the Mauryan list as all the puranas are agreed that there were only 22 kings of this dynasty after the war]. This must have been rounded off and stated as 1000 in Vishnu & other puranas.

Now,
BC 512 (Date of Srenika - crowned by his father Sunika) + 937 years = BC 1449.
This implies that the year of commencement of Kaliyuga/Yudhishtira shaka is BC 1449 or Aryabhatta kali year 1653 (BC 3102 - BC 1449).

As it happens, this date is exactly 1000 years later than the date assigned to this epoch by Varahamihira (Brhatsamhita) and Kalhana (Rajatarangini).

Varahamihira(around 505AD), in his encyclopedic work ,the Brhatsamhita quotes the opinion of one 'Vrddha Garga' that Yudhishtira shaka was 2526 years before the shaka era :
'Asan maghAsu munaya: kAley yudhishtirey shatam |
Shad dvika panca dvi (2526) yuta: shaka kAla: tasya rAgnashca||'

Thus, 2526-AD 77 = BC 2449 = Yudhishtira shaka – as per Vriddha garga..

Kalhana, the Kashmiri Historian too, in his work Rajatarangini quotes the above verse and states that the bharata war took place in Kali 653 :

‘shateSu ShaTsu sArdheSu tryadhikeSu (653) ca bhUtaley|
kaler gateSu varSaNAm abhavam kurupANdava: ||’

He rejects that the war took place before the aryabhatta kali year BC 3102 & places it in kali 653 = BC 3102- 653 = BC 2449. The same as given by Brhatsamhita.

This difference of exactly 1000 years between the dates arrived chronologically(BC 1449) and by these 2 authorities (BC 2449) is highly suspicious and suggestive. It makes one conclude that the actual date of Y.shaka was put back a thousand years for reasons best known to those who did it [For probable reason see end of Chapter XIV].

This thus is the first, though indirect, confirmation of the date of BC 1449 arrived from the date of Srenika Bimbisara & the Barhadratha chronology.

Here is another positive confirmation for the same:

The bhagavata purana states this :

‘Arabhya bhavato janma yAvan nandAbhiSecanam | etad varSa sahasram tu shatam pancadashottaram||’
“ From your(Parikshit’s) birth to Nanda's coronation the gap is 1115 years” - Bhagavata purana (XII,2-26)

Another reading of the same verse :
‘Arabhya bhavato janma yAvan nandAbhiSecanam | etad varSa sahasram tu shatam pancAshaduttaram ||’
“ From your(Parikshit’s) birth to Nanda's coronation the gap is 1150 years” - Bhagavata purana (XII,2-26)

Now,
from the chronology presented in Chapter V, the Nandas came to power in BC 334.

BC 1449 – BC 334 = 1115 !!

Thus, in one stroke both the verse of the Bhagavata and the chronology presented by me mutually confirm each other.I’ll get back to the reading 1150 later (Chapter X).

From this we have :
The Yudhishtira shaka : BC 1449
Barhadrathas : 22 kings : 937 years : BC 1449 to BC 512
Srenika Bimbisara : 52 years (28+24) : BC 512 to BC 460
Nandas : 22 years : BC 334 to BC 312
Chandragupta Maurya : BC 312

This chronology has satisfied 2 tests:
1. The 2 monks test (See Chapter VI) and
2. The test of the Great gap (See Chapter III).

Before going into the intricacies of fixing the date of the Mahabharata war, I must digress and mention about the various eras employed in India for astronomical & religious purposes.

Chapter VIII : The Confusion caused by Aryabhatta

The concept of 4 yugas : Krta, Treta, Dwapara and Kali and their repeating cycles is very ancient. References to the same can be found in the Vedas,Manusmriti,Mahabharata and in all the puranas. However, no where in these ancient literature we find a mention of a general conjunction of all the planets at '0' degrees of the sidereal zodiac.

But Aryabhatta(AD 499), a brilliant astronomer that he was (& an influential one too), utilized this puranic concept of the Mahayuga cycles to evolve an astronomical system which is used in traditional hindu panchang making till today. However he chose an artificial date of 18th feb BC 3102 for his epoch. Such an early date was chosen because :

1. Most of the planets were somewhat close to the beginning of the sidereal zodiac on that date.
2. The error in assuming a wrong mean position of 'o' degs for the planets would be compensated if the error is spread over a large period of time.

Hence, Aryabhatta chose such an early date for facilitating astronomical calculations – and this clever device has indeed accomplished it's purpose.

Thus,it was aryabhatta who first fixed the epoch of BC 3102 (now called the Kaliyuga epoch but I prefer to call it the Aryabhatta Kaliyuga) in his immortal text 'Aryabhattiya'.

Unfortunately all the astronomers who came after Aryabhatta mistook this astronomical epoch with the actual Kali epoch which was in the 36th year after the Mahabharata war.

Aryabhatta himself states that this epoch(BC 3102) was 'bhAratAt pUrvam' or before the Mahabharata war. Thus, this astronomical kali cannot be the same as that of the puranas.
This is why Varahamihira & Kalhana held the view that the war took place after the (aryabhatta) Kaliyuga.

That Aryabhatta did not regard BC 3102 epoch as the traditional kaliyuga beginning is clear from the fact that - as against the puranic division of the mahayuga in the ration 4:3:2:1 (ie),

Krta – 17,28,000 yrs
Treta – 12,96,000 yrs
Dwapara – 8,64,000 yrs
Kali – 4,32,000 yrs

He holds them to be in 1:1:1:1 ratio (ie) each yuga with 10,80,000 yrs. This cycle of 4 equal yugas are followed indirectly even in the Suryasiddhanta as noticed by Rev.Burgess in his translation of that work.

Thus, aryabhatta's yuga system & his epoch of BC 3102 has nothing to do with the puranic kaliyuga. The latter served merely as an inspiration for Aryabhatta to device his ingenious planetary model.
However, some orientalists, without appreciating these facts, held & still hold that the Mahabharata war took place in BC 3138 ie., 36 years before BC 3102 & that BC 3102 is the actual date of the kaliyuga.They also trace the historical dynasties from this impossible date. To suppose that the Nandas came 1115 years after BC 3102 ie., in BC 1987 is a historical absurdity.

The point to be noted is that traditionally 2 yudhishtira shakas have been employed in hindu texts.

a. The year of Coronation of Yudhishtira = Year of the Mahabharata war = Year of Parikshit's birth
b. The year of abdication of the throne by Yudhishtira(on hearing of Krishna's demise) = 36th year after the war = Actual Kali yuga = Coronation of Parikshit.

It is usual to mark the demise of a great soul by an epoch as in the case of Mahavira, Buddha etc. An example for the second Y.Shaka('b' above) is found in the astrological text 'JyotirvidAbharaNam' – a text misattributed to Kalidasa.

The date of Vikrama era is given as:
" yudhishtirAt veda(4) yuga(4) ambara(0) agnaya:(3)"

In other words, 3044 years after Yudhishtira.

The commentator of the text remarks, "yudhishtirAt kalisankramaNA kAlasyAt chatus chatvArimshat adhika shata trayam"

(ie) "From Yudhishtira means from the beginning of Kali yuga - 3044 years"
or BC 3102 – 3044 = BC 58 = Vikrama sanmvat

Thus we can see the 2nd Y.Shaka being used here. But it must be noted that this is a later text and like all later texts it takes kaliyuga to begin in BC 3102 as given by Aryabhatta (as a matter of fact Aryabhatta never actually mentions that Kaliyuga began in BC 3102!).
The date of 58BC is of course correct. This verse is just a linking up of the existing vikrama samvat with the aryabhatta kali yuga.

Anyway, I quoted this only to show that 2 Yudhishtira shakas were in vogue in India – one the year of the war & the other the year of the Kaliyuga commencement.

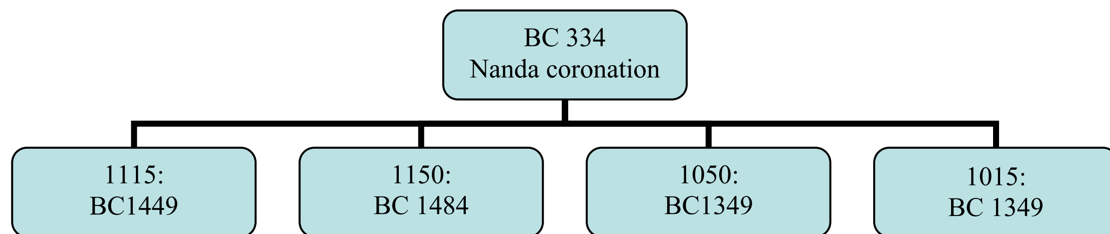
This distinction will be useful for understanding the succeeding chapters on the date of the Mahabharata war.

Chapter IX : The Great war (Mahabharata)

The historicity of the Mahabharata war is now universally accepted though opinions differ on the magnitude of the war.

As seen in Chapter VII, using the conjectural chronology, I arrived at the date BC 1449(Aryabhatta kali 1653) as the beginning of the line of barhadrathas after the Bharata war.

I might as well say here that I analysed all the following years using modern astronomical tables :



I did not restrict myself to the above 4 years but analysed a few year before & after the aforesaid years as the figure given in the puranas might have been an approximate one.

Having thoroughly analysed all the above dates, the results I got were highly interesting:

1. The planetary postions mentioned in the Mahabharata tallies only with those in the year BC 1486(Aryabhatta kali 1617) and not with any other year.
2. This year is exactly 36 years before A.Kali 1653 (BC 1449) as arrived through the conjectural chronology.
3. The difference between the 2 patas(readings) of the verse in the Bhagavata purana = 1150-1115 = 35 years = The completed years from the bharata war to the Kaliyuga(as Krishna & Yudhishtira passed away in the 36th year from the war).

In other words both the readings are correct! The difference is due to the 2 different Yudhishtira shakas in use being linked up with the Nanda epoch of BC 334.

Thus:
The war was fought in the year BC 1486 (A.Kali 1617)
The Kaliyuga began in BC 1449 (A.Kali 1653) at the end of the pandava rule & the list of all the dynasties are given from this date on.

The above conclusion is supported by both astronomical and chronological proofs. The detailed astronomical reasoning is given in Chapter XI.

Chapter X : A solution to the Kashmir dispute

Kalhana, in his chronicle of Kashmir kings, the Rajatarangini gives the following details:

1. He quotes the vexed Brhatsamhita verse ‘Asan maghAsu’ and based on it gives the date of the bharata war as (aryabhatta)kali 653 or BC 2449.
2. The date of writing of the Rajatarangini is shaka 1070 or AD 1148 (1070+78AD).
3. Gonanda I of Kashmir was killed before the Mahabharata war by the yadavas.
4. His pregnant wife was crowned to the Kashmir throne by Krishna. She gave birth to a son named after his father : Gonanda II
5. At the time of the war, Gonanda II was just an infant.
6. There was a gap of 1266 years after Gonanda II in which reigned 52 kings!
7. Kalhana is not able to name these alleged 52 kings but names only a few – that too making the blunder of including Ashoka & his son Jalauka in that list!
8. There was a king ‘Abhimanyu’ of that line who had a son Gonanda III.
9. Gonanda III lived 2330 years before the date of Rajatarangini (ie) **AD 1148 – 2330 = BC 1182.**
10. After Gonanda III came 20 more kings of the line and all of them put together ruled for 1014 years.

The above details are taken from the first Taranga(Chapter) of the Rajatarangini.

From the above, one fact is clear: Kalhana is unable to name the 52 kings who reigned between the MB war and Gonanda III from the ancient records on which he based his work – (ie) he is not able to account for the gap of 1266 years between BC 2449 and BC 1182.

Because of this, some might opine that there were only 2 Gonandas : one killed before the war – Gonanda I & one at the time of the war – Gonanda II. In other words Gonanda III & Gonanda II were one and the same and that there was no gap intervening them at all. It follows that the Mahabharata war should be placed around BC 1182 – the date of Gonanda III.

On the face of it, this theory seems highly logical and probable. But we must not over look the facts outlined below:

a. Kalhana clearly mentions that the father of Gonanda III was a ruler named ‘Abhimanyu’. So he could not be the same as Gonanda II.
b. Though his huge gap of 1266 years is obviously flawed, still from his statements it is clear that the war took place much before Gonanda III’s time. Since he has based his work on other ancient sources, this must be true.
c. In the past chapters, we have seen that the date of BC 1449 for the Yudhishtira shaka is borne out in 2 ways: (i) BC 512(Bimbisara) + 937 = BC 1449 and (ii) BC 334(Nandas) + 1115 = BC 1449.

So we must look for some other way out of this entanglement.

The gap between this date of BC 1449 and Gonanda III’s date of BC 1182 is : 1449-1182 = 267 years = 1000 years lesser than the figure 1266 years mentioned by Kalhana.

What is the sanctity of BC 1182?
Is there any way to explain this gap of 267 years?
The answer is yes to the last question.

The Vayu purana professes that it was recited during the time of the Magadhan king ‘Senajit’ – the 7th king after the war. The purana gives the reign periods of the first 6 kings in the past tense & from the 8th king onwards in future tense (See Appendix III – 1). Senajit is given as the ‘sAmpratam’ = current king. Divakara of the Solar dynasty and Adhisamakrishna of the Lunar dynasty are said to be his contemporaries.

Now, the gap between the first magadhan king after war, ‘Somadhi’ and Senajit(Current) is given in the purana as = 58+64+26+40+56+23 = 267 years!(See Appendix I & Appendix III-1).

This is exactly the gap between BC 1449 and BC 1182!

Kautilya(Arthashastra) and Patanjali(Mahabhashya) show acquaintance with many puranic stories. Hence it is a certainty that puranas existed even before their times – though not in their present form & number. Perhaps the original puranic samhita with its ancient genealogies and stories was compiled during this time. The vayu purana itself speaks of a 5 year long satra(Yajna) held at Kurukshetra under the auspices of Adhisamakrishna of the Chandra vamsha. The practice of reckoning from the year of the war (BC 1486) and the Kali epoch (BC 1449) might have begun at that time. It is possible that the names of all the kings ruling at that time were collected by the sages and Gonanda III would have been reigning at Kashmir at that time. Hence the ancient Kashmir records based on which Kalhana wrote his work might have started with this date of BC 1182 of Gonanda III and Senajit of Magadha.

However, as Kalhana had accepted the wrong Yudhishtira epoch based on the verse in Brhatsamhita (which itself was a quote from Vrddhagarga by Varahamihira) which placed the epoch 1000 years earlier than it was in reality, he could not explain the resultant huge gap of 1267 years between Gonanda II and Gonanda III from the extant Kashmir records, which actually represents the reign period of 6 kings of Magadha who preceded Senajit for 267 years.

[Note :
A . From a study of the puranic texts, it is evident that 3 important satras were held in ancient times:
1. The **First Satra (BC 1486)** held at the time of the bharata war itself as evidenced by Chapters 78 & 79 of the 10th skandha Part II of the Bhagavata purana. This was held at **Naimisharanya**. Suta Romaharshana, disciple of Vyasa recited old stories at that time.After he died his son, Ugrashrava took his place as the reciter of stories.
2. The **Second satra** (about **BC 1389)**– the **Sarpa satra** – held at the time of King Janamejaya(son of Parikshit who died of a snake bite) at **Hastinapura** which involved the gruesome ritual of butchering snakes. Thankfully, this senseless act

was stopped by the intervention of sage Astika. Then, sage Vaishampayana recited the story of the pandavas(Mahabharata) for the first time in public.
3. The **Third satra (BC 1182)** at the time of Adhisamakrishna, as noted above, at **Kurukshetra** which probably involved the compiling of ancient genealogies.

Please note that this is not an attempt to equate these gatherings of sages to the Canonical Councils of the Buddhists at the time of Ashoka etc. While the latter were held to codify Buddha's teachings and for disciplining the sanghas, the former were merely to hear/recite old stories during the long satras.

B. I would like to add here that the concept of 'Sanghas' of monks cannot be an original idea of Buddha as some sources believe. The Perungadai of the Jain tamil poet Konguvelir (which is a faithful rendering into tamil of the Brhatkatha of Gunadhya) talks about 'Muni Sanghas' of Samkhya sages (followers of Sage Kapila) and of a 'Samkhya maata'- a widow Parivrajika(female monk) of the samkhya order who was an adviser to Vasavadatta – all this at the time of King Pradyota of Avanti – who was inturn a younger comtemporary of Bimbisara & Buddha. Moreover, the Buddhist/jain texts themselves mention the followers of the samkhya system of Kapila. Kalidasa's Malavikagnimitram also has a parivrajika as one of its principle characters. Infact, she speaks in Sanskrit like the other 'higher characters' instead of Prakrit. She was an advisor to the queen of the Brahmin king Agnimitra. So these samkhya monks & parivrajikas must have been held in high esteem in those days.
Hence it is more probabale that the concept of Sanghas of monks was originated by these samkhya monks and parivrajikas which was later perfected by Buddha based on the democratic model of the gana rajya of Vaishali.
This explanation is perhaps out of place here but I could find no other place to insert it!]

Thus, Gonanda II (BC 1449) must have been succeeded by about 5 kings, then came 'Abhimanyu' and then his son Gonanda III at about BC 1182.

This, by far, is the most acceptable solution to this Kashmir dispute.

Chapter XI : Astronomical Proofs

The proof for BC 1486 being the date of the mahabharata war and BC 1449 for the abdication of the throne by Yudhishtira on hearing of Krishna's demise are two fold:

1. Internal proof based on the Text of the Mahabharata and
2. External astronomical proof

Internal Proof :

I shall first summarize the important astronomical landmarks with regard to the war date as given in the Mahabharata text and then go on to show how they tally with the year BC 1486.

1. The day Krishna left for Hastinapura as an emissary:

"**maitre muhUrte samprapte mRdvarciSi divAkare |**

kaumude mAsi revatyAm sharadante himAgame ||"

"In the kArtika month, revati star, at the end of the Sharad rtu and the beginning of the Hemanta rtu." – [Udyogaparva,83-7]

2. Duryodhana declares war & refuses the peace proposals:

"**prayAdhvam vai kurukshetram puSyo.adyeti puna: puna:** |"
"Go along to Kurukshetra, it is Pushya star today" – [Udyoga,150,3]
This statement was made by Duryodhana in open court to the kings on his side as Pushya star is supposed to be auspicious.

3. Krishna meets Karna:

"**saptamAccApi divasAd amAvAsya bhaviSyati** |
sangrAmo yujyatAm tasyAm tAmAhu: shakradevatAm ||"
"7 days hence there will be an amavasya day. Let the fight be on that day with the Indra's star(Jyeshta star)" – [Udyoga,142-18]

4. Bhishma's fall on the 10^{th} day of the war:

"**ahani yuyudhe bhiSmo dashaiva paramAstravit** |"
"Bhishma fought for 10 days" – [Adiparva,2-30]

5. Bhishma's death :

"**aSta pancAshatam rAtrya: shayanAd asya me gata:** |
shareSu nishitAgreSu yathA varSa shatam tathA ||
mAgho.ayam samanuprApto mAsa: sowmyo yudhishtira |
tribhAga sheSa paksho.ayam shuklo bhavitumarhati ||"
Said by Bhishma before passing away:
"58 days have been passed by me today on the bed of arrows as if they were a 100 years. The beneficial Magha month has arrived,O Yudhishtira, and it is Shukla paksha with $1/3^{rd}$ of the paksha left" – [Anushasana parva,167-27&28].

Note:
$1/3^{rd}$ of paksha = 15*1/3 = 5 tithis balance
Thus, current tithi = 15-5 = 10
Therefore it was Magha shukla dashami.
Bhishma was waiting for the Uttaranyana to give up his life. Hence that day must have been the day of Winter solstice.

6. Vyasa’s observations before the war:

a. “**alakshya:prabhayAhIna:pourNamAsIm ca kArtikIm**”
“The full moon of the month of Kartika was lustureless” – [Bhishma parva,2-23]

b. “**rAhum arkamupaiti**” “Rahu is closing in on the Sun”
[Bhishma,3-11].
Note: Vyasa approaches Dhritarashtra and talks to him about the omens he had observed in the days before the war. Two chapters : Bhishmaparva – II & III deal with the same. It must be remarked that the whole of Chapter III seems to be an interpolation. The same is the case with Chapter 143 of the Udyogaparva. The purpose of these 2 chapters is to swell the ominous feeling before the war by giving astrological allusions and omens. The positions of the planets other than the sun & the moon are selfconflicting – what is said in one verse is contradicted by another in the same chapter. Clearly they are merely later interpolations based on astrology which are absolutely valueless for our purpose. However one particular fact mentioned in both these chapter is worth noting,ie, the sun was close to rahu.(See the quote above).By implication, since the war began on amavasya day, all the three – Sun,Moon & Rahu(Ascending node of the moon) were in the same rashi or atleast very close to each other.

From the above it emerges that:

1. Krishna left as an envoy 18 days before the war in the (amanta)Kartika month, Revati nakshatra(as Revati to Jyeshta is 18 stars).
2. 15 days before the war (ie) on Kartika Poornima, Vyasa observed that the full moon was lustureless. This,however,he related to Dhritarashtra only on the day before the war.
3. 10 days before the war (ie) Kartika month Pushya star, Duryodhana declared war in open court and urged his troops to move to Kurukshetra.
4. 7 days before the war, Krishna met Karna & tried to make him join the pandava side but was unsuccessful.
5. The war began on the Amavasya day of Kartika month (the following Prathama being the beginning of the month of Margashira), when the moon was in conjunction with the Jyeshta star. The Sun,Moon & Rahu were very close to each other– in the same rashi - on that date.[By inference it must be the Vrishcika rashi because :

(i)Whole of Jyeshta star falls in the Vrishcika sign,so Moon was in that rashi & (ii)The amavasya marks the end of Kartika and commencement of Margashira month; this also implies that the Sun was in the Vrishcika rasi]

6. Bhishma fell on the 10th day of the battle.
7. The war ended on the 18th day.
8. After 58 days had elapsed since Bhishma's fall (ie) 68 days from the commencement of the war, Bhishma gave up his life. It was sayana uttarayana(Winter solstice), Magha shukla dashami that day.

Armed with this calendar of events from the Mahabharata,let us attack the astronomical data for the year BC 1486.

[Note: Some have suggested that the uttarayana referred to in the Mahabharata is the nirayana uttarayana (ie) sidereal – not the actual tropical one.This is refuted by me on two grounds:

1. Shukla dashami when the Sun is in Makara 1(sidereal 270 degs) can only fall in the lunar month of Pausha & not Magha.
2. Though, at present we are wrongly observing Uttarayana as per the nirayana calendar, it is not supported by any of the ancient vedic,smriti texts. No doubt the traditional calendar has been a siderial one from the earliest times but the observations of Vishu(equinox) and Ayana(Solstice) had been as per the tropical reckoning only. This is proved by the statements in Brhatsamhita & Pancasiddhantika of Varahamihira about the shifting of the Soltices.[More on this later].

A. Planetary postions for Saturday, 25th October, BC 1486(Julian), JD 1178959,Aryabhatta kalidina 590493 – 06.00 AM.
[Using modern planetary table – Using Lahiri's ayanamsa]

Nirayana Sun : 222.829 deg
Nirayana Moon : 221.386 deg
Nirayana Rahu : 220.299

Thus we can see that the day began with amavasya with the Sun, Moon & Rahu in Vrishcika rashi. The moon moved to Jyeshta star(which begins at 226.67deg) later that day – as per the modern tables.

Even the traditional tables based on Aryabhattiya show that the day was an amavasya day with the moon moving to the Jyeshta star a few hours later than the Sunrise :
Sun: 236.321 deg
Moon : 224.401 deg

Though the position of the Sun is manifestly erroneous, the lunar postions matches with that got by using the moder tables, showing the accuracy of the traditional lunar tables for such ancient dates.

B. Positions of the Sun and the Moon on Friday,2nd January,BC 1485(Julian), JD 1179028, Aryabhatta Kalidina 590562 – 03.00 PM : 69th day after the date above.
[Using modern planetary table – Using Lahiri's ayanamsa]

Nirayana Sun : 293.544 deg
Nirayana Moon : 45.592 deg
Sayana Sun : 270.001 deg

Tithi : Shukla dashami
Month : Magha

From the above, it can be seen that:

a. The positions of the Sun,Moon & Rahu on 25th Oct BC 1486 matches with those mentioned in the Mahabharata – see point (5) of the summary given above.
b. Exactly after the elapse of 68 days from that date – on the 69th day = 2nd Jan BC 1485, we have the sayana uttarayana or Winter solstice.It happened to be a magha shukla dashami – see point (8) above.
c. Now, when Krishna left as an envoy it is stated that it was at the end of the sharad rtu – See point (1) above. On that day the sun was approx at 206 deg according to it's nirayana position(modern). Again,

   Vasanata Rtu : Meena & Mesha :330deg to 30deg
   Grishma : Vrushabha & Mithuna : 30deg to 90deg
   Varsha : Karkataka & Simha : 90deg to 150deg
   Sharad : Kanya & Tula : 150deg to 210deg
   Hemanta : Vrishcika & Dhanus : 210deg to 270deg
   Shishira : Makara & Kumbha : 270deg to 330deg

Since Sharad Rtu ends at 210 deg, 206deg is indeed at the end of Sharad as mentioned in the Bharata text.[Treating Mesha & Vrushabha as Vasanta Rtu is of later origin and not supported by ancient texts].
Some may object to this by arguing that the Rtu's must be reckoned from the sayana(Tropical) zodiac and not the Nirayana(Sidereal) zodiac and after all, Uttarayana has been taken in the sayana only.
This is of course scientifically correct because the seasons are regulated by the tropical & not the sidereal zodiac. However, right from ancient times it is the sidereal calendar which been in civil use in our country. Moreover, the tropical position could not have been meant here because :
The gap between Krishna's emissary and Bhishma's death(Uttarayana) was 18+69 = 87 days.
The sun travels at the rate of about one degree per day(0.98561deg mean). Since the sun was at 270deg by tropical reckoning on the day of Bhishma's death, 87 days before that date, the Sun would be about 270 - 87 = 183 deg(Tropical). This certainly cannot be regarded as sharad's end.
This difficulty is solved if we accept the sidereal reckoning:
On the day Bhishma passed away, Sun = 293.544 deg (as given earlier)
Hence 87 days prior to that , the Sun would be at 293 – 87 =206 deg = sharad's end!

Thus we can see that point (1) is also satisfied.

It is clear now that all the major astronomical landmarks mentioned in the Mahabharata in connection with the war are found in the year BC 1486 (Aryabhatta kali 1617) = 36 years before BC 1449 (Aryabhatta kali 1653).

Still, some might argue that such a co-incidence in the planetary positions do occur though infrequently in different centuries. To satisfy them there is one final proof as under.

External Proof :

Every student of astronomy will be aware of the precession of the equinoxes – termed as ayanacalana in Indian astronomical treatises. The equinoxes/solstices have a retrograde motion of about 50.27" a year at present, though they were even slower in the past.

The celebrated astronomer-astrologer Varahamihira states in his 'Pancasiddhantika' that during the time of 'Parashara', the uttarayana occurred at the beginning of the Dhanishta star and the dakshinayana in the middle of Ashlesha star. He mentions this in his encyclopedic work Brhatsamhita too :

"AshleSArshAd dakshiNam uttaram ayanam raver dhaniSThAdyam |
nUnam kadAchidAsId yenoktam pUrvashAstreSu ||"
"In ancient texts it is mentioned that the Dakshinayana (Summer
Solstice) occurred when the Sun was in the middle of 'Ashlesha'
star and the Uttarayana (Winter Solstice) when the Sun was at the
beginning of 'Dhanishta' star"[B.Sammhita,III-1].

This observation belongs to Parashara as mentioned in the Pancasiddhantika. So there must have been extant during Varahamihira's time, an astronomical work of Parashara or atleast a work mentioning his observations.

Now, Parashara was the father of Sage Vyasa, who in turn was about the same age as Bhishma. Thus the observations made by Parashara must belong to the time of the Mahabharata.

In the given case, on the day of the Uttarayana (ie) 2^{nd} Jan 1485 BC, the Sun by his sidereal position was at 293.544deg.
The dhanishta star commences at 293.333degs.
Thus we can see that the Sun was indeed at the beginning of Dhanishta star when the winter solstice occurred - as noticed & recorded by Parashara!

This proof finally seals the date of BC 1486 as the year of the Mahabharata war.

Chapter XII : The End of the Pandavas

The Mahabharata clearly states that in the 36^{th} year from the war :

1. The city of Dwaraka was destroyed by flood;

2. Krishna & other yadavas perished;
3. The pandavas, having crowned Parikshit(son of Abhimanyu), left for the Himalayas and died.

"tvamapyupasthite varSe SaT trishe madhusUdana| ….nidhanam samavApsyasi||"
Gandhari's curse : "Even you, in the 36th year from now, will die" – [Striparva,25-44&45]

"mene prAptam sa SaT trimsham varSam vai keshisUdana:|"
"Krishna reflected that the 36th year had arrived" – [Mausala parva,2-20]

"idam tu nagaram sarvam samudra: plAvayiSyati"
"All of this city(Dwaraka) will be flooded by the ocean" – [Mausala parva,7-10]

The puranas also unanimously mention that in the 36th year after the war, Krishna died and that his death marked the arrival of the Kaliyuga.

"yasmin kRSNo divam yAtas tasminneva tadAhani | pratipannam kaliyugam…||"
"on the very day that Krishna died, the kaliyuga began" [Bhagavata,Vishnu puranas].

As is evidenced by these statements, the actual Kaliyuga began in the 36th year after the great war. This epoch was also called Yudhishtira shaka as pointed out earlier. This occurred in the year BC 1449 (A.Kali 1653 = 1617+36) as proven by astronomical as well as chronological reasoning.

Chapter XIII : North meets South

Keralites adopt an era styled the 'Kollam era' which commences in the year AD 824. It is traditionally believed that it was actually an era of great antiquity from which a couple of thousand years were eliminated to avoid using bulky figures in marking the calendar. No one has so far offered a clear-cut explanation for its origins.

Now, as mentioned earlier(Chapter X), a great Satra was organized at Kurukshetra at the time of King Senajit of Magadha in BC 1182. As per the Vayu purana, it was a Dirgha Satra(long sacrifice) carried on for 5 years. Hence it would have been completed in the year : BC 1182 – 5 = BC 1177.
If we reduce two thousand years from the above year, we get:
BC 1177 – 2000 = AD 824-823 = The beginning of the present Kollum era!
In other words, this era was originally counted from the end of the great 5 year-long Satra at Kurukshetra whereas the Kashmir Gonanda III's era was reckoned from the year in which the Satra began.

This theory is strengthened by the fact that the town of 'Kollum' from which this epoch is reckoned is in the same meridian (longitude) as Kurukshetra in which the Satra took place. As per the modern TTK atlas,
Kollum : 78:36 E
Kurukshetra : 78:54 E

Also, this theory is in consonance with the tradition that the present epoch of AD 824 was arrived at after eliminating a couple of thousand years.

The fact that two states in our country : one if the northern most corner – Kashmir and another in the southern tip – Kerala had their calendars based on this 5 year Satra (BC 1182 – BC 1177) shows the importance attached to the same. Even the Vayu purana professes that it was recited at that time. The Vishnu purana records that there were 4 original samhitas based on which it was composed. They are:

a. The original purana samhita (I) composed by Sage Krishna Dwaipayana Vyasa;
b. This was redacted by his disciple Romaharshana Suta. So it came to be known as the Romaharshana samhita;
c. Three diciples of Romaharshana compiled samhitas of their own : Kaashyapa samhita(II), Saavarni samhita (III) and Shaamsapaayana samhita (IV).

There is nothing incongruous in this tradition and it can be accepted as such. The Kurma purana also refers to a samhita compiled by Shaamsapaayana. Probably the original Vayu purana and the kernels of Vishnu and other ancient puranas were composed based on material from all these four puranic samhitas.

Chapter XIV : After the Mauryas

Coming back to the realms of post-epic period, we have seen that the dates of the kings upto the Mauryas have been fixed with maximum possible accuracy. To proceed downwards, the Vayupurana clearly lists the names & the reign periods of the Shungas & the Kanvas who successively occupied the Magadhan throne after the fall of the imperial Mauryas. They have been tabulated by me in Appendix I.

The problem arises with the Shatavahana dynasty or the Andhras, as they called in the puranas. The list given in the Matsya purana (of 30 kings) is fully supported and corroborated by epigraphic and numismatic evidence. These 30 kings ruled for a period of 456 years in all. The problem is fixing the beginning of their dynasty.

Table IV

	Andhra Satavahanas	**Years**	**Reign(A)**	**Reign(B)**	**Reign(C)**
1	Simuka\Sindhuka	23	BC 235-212	BC 262-239	BC 203-180
2	Krishna	10	212-202	239-229	180-170
3	(Malla)Shatakarni I	10	202-192	229-219	170-160
4	Purnotsanga	18	192-174	219-201	160-142
5	Skandastambi	18	174-156	201-183	142-124
6	(Shri)Shatakarni II	56	156-100	183-127	124-68
7	Lambodara	18	100-82	127-109	68-50
8	Apilaka	12	82-70	109-97	50-38
9	Meghaswati	18	70-52	97-79	38-20
10	Swati	18	52-34	79-61	20-2
11	Skandaswati	7	34-27	61-54	BC 2-AD 5
12	Mrigendra Swatikarna	3	27-24	54-51	AD 5-8
13	Kuntala Swatikarna	8	24-16	51-43	8-16
14	Swatikarna	1	16- 15	43-42	16-17
15	Pulumayi I	36	BC 15-AD 21	42-6	17-53
16	Arishtakarna	25	AD 21-46	BC 6-AD 19	53-78
17	**Hala-Shalivahana**	5	46-51	AD 19-24	**78-83**
18	Mantalaka	5	51-56	24-29	83-88
19	Purikasena	21	56-77	29-50	88-109
20	Sundara Shatakarni	1	77-78	50-50	109-110

21	Chakora Shatakarni	1	78-78	51-51	110-111
22	Shiva Swati	28	78-106	52-80	111-139
23	Gautamiputra Shatakarni	24	**106-130**	**80-100**	139-163
24	(Vashishtaputra)Pulumayi II	28	130-158	100-128	163-191
25	Shivashri Pulumayi	7	158-165	128-135	191-198
26	Shivaskanda Shatakarni	3	165-168	135-138	198-201
27	Yagnashri Shatakarni	29	168-197	138-167	201-230
28	Vijayashri Shatakarni	6	197-203	167-173	230-236
29	Chandashri Shatakarni	10	203-213	173-183	236-246
30	Pulumayi III	7	213-220	183-190	246-253
	Total	**456**			

[Some scholars accept a shorter list of about 19 kings given in the Vayu purana and form their chronology but this is unacceptable for three reasons : (i) All the puranas – including the Vayu, state that there were 30 kings in the line who ruled for 456 years; (ii) On reading the Vayu purana text it becomes clear that it gives only a summarized list stating only the major rulers like Shatakarni I and Gautamiputra Shatakarni & (iii) Mastya list mentions 'Kuntala shatakarni'(13th king) who's historicity is proved by an allusion to him made in Vatsyayana's Kamasutra. This king is not mentioned in the Vayu list. Therefore the Vayu list is essentially incomplete].

The second chronology('B' above) adopted by some is untenable because it would place the first ruler Simuka right in the period of Ashoka's reign and it is impossible to imagine that the Shatavahanas emerged as independent rulers under the iron-fist rule of Ashoka, that too during the intitial period of his reign. The extent of Ashoka's empire was as large as that of present day India and the Shatavahans could not have had any place in it. Hence thery 'b' is to be discarded.
Shatavahanas could have risen only after Ashoka was dead and gone.

In this respect, the first chronology(column 'A')accepted by some others is also difficult accept. In this scheme the first ruler-Simuka(Sindhuka) came to power in BC 235 which falls within the reign of Ashoka, though in his final years.

In this regard, there are other things to be considered too:

a. The Hathigumpha inscription of Kharavela of Kalinga – the date of which has been put at about BC 160(though the date is not certain) mentions as his contemporaries : 1. Barhaspati mitra of Magadha and 2. King Shatakarni
b. The Girnar inscription of Rudradaman II belonging to AD 150 refers to the defeat of king 'Shatakarni' .

(a).The Brhaspati mitra has been identified with the Shunga king Pushyamitra because 'Brhaspati' is the lord of the star 'Pushya' as per hindu astrological tradition. Again, there is no record of any other ruler bearing that name at that time in magadha. Therefore this supposition is plausible and the chronology accepted here is in consonance with this.[Pushyamitra shunga : BC175 to BC139].
The problem is with the identity of the 'shatakarni' of this inscription. As per chronology 'B' above, the contemporary of Kharavela would be the 6th king Shatakarni II. But this is to be rejected as this would place the beginning of this line at too early a date as pointed out earlier. As per 'A', Kharavela's contemporary would not be a king named 'Shatakarni' but would be 'Skandastambi'.

(b). The king mentioned by Rudradaman in his Girnar inscription would be Vasishtaputra Pulumayi (24th ruler) and not one named ‘Shatakarni’ if the first chronology (‘A’) is accepted. The theory ‘B’ would make this king ‘Yagnasri Shatakarni’ but for the same reason as in the previous case, this cannot be accepted.

So what is the way out?

Historians try to pacify these incongruities by opining that the Shatakarnis mentioned in these two inscriptions need not be actually named ‘Shatakarni’ but might be anyone of the Shatavahanas as this might be a family name. But this is nothing more than a pacificatory stand and if a more acceptable chronology which accords with these two inscriptions is advanced, it must be accepted.

I must digress here and put in some words about Vikramaditya and Shalivahana.

Vikramaditya

The most widely used era in India, the Vikrama Samvat was founded by this King. But his historicity has been unnecessarily questioned by many western historians. No doubt the legends of Vikramaditya have grown mixing up this era founder with one or more of the Gupta kings who bore this title. Nevertheless , it must be remembered that for the Guptas it was merely a title and not a name. Since that is the case, someone who was NAMED Vikramaditya must have existed who must have been an exemplary ruler and whose name numerous kings in Indian history – including the Guptas- adopted with pride.

Kalhana, in his Rajatarangini mentions two Vikramadityas. One who was the contemporary of poet Matrugupta and King Pravarasena(of ‘Setubandham’ fame). This is none other than Chandragupta II who took the title Vikramaditya. This is confirmed by the fact that Skandagupta (grandson of Chandragupta II) is mentioned in the same text as having lived some time after Pravarasena.
The same book also mentions an earlier Vikramaditya whose son ‘Pratapaditya’ became the ruler of Kashmir. Kalhana specifically states that this Vikramaditya is different from the later Vikramaditya(Chandragupta II).

This then, must be the hero of BC 57(Vikrama samvat).

The jain texts – Merutunga’s Teravali and Kalakacharya katha tell us this story:
‘Gardabhilla’ was a king of Ujjain who humiliated a jaina monk Kalakacharya. The monk sought the help of a shaka king who invaded Ujjain and took over the kingdom. At that time Gardabhilla’s son Vikramaditya was a year old. Seventeen years later, Vikramaditya returned and defeated the shakas and established himself in his fathers throne. This victory,he marked by founding the Vikrama samvat of BC 57. He then ruled for 60 years. 75 years later, his decendants were again defeated by the shakas, the event marked by the Shaka era of AD 78.

The veracity of this story is proved by the fact that puranas mention that contemporaneous with the Andhras(Shatavahanas) were :
7 abhiras,10 gardabhilas and 16 shakas.(See Appendix III-9).

The Gardabhillas mentioned in the puranas must be the Gardabhilla mentioned above, his son Vikramaditya, Vikrama's son Pratapaditya and their descendants.
The defeat of Vikramaditya's descendants in the hands of the Shakas is attested by the puranas which state that the line of Gardabhillas was followed by the rule of the Shakas.

Hence there is no need to deny - and indeed no propriety in denying - the historicity of the heroic founder of the Vikrama samvat.

Shalivahana & the Shaka era

Some historians hold that the Shaka era of AD 78 (the occasion of whose commencement has been referred to in the previous section) was started by Kanishka, the Kushan ruler of Northwestern India.
This is not acceptable because:

1. First of all, Kanishka was not a Shaka(of scynthian origin) but a kushan king.
2. Kanishka ruled from Peshawar – a long way from Ujjain and it is unlikely that he invaded Ujjain and defeated the gardabhillas. It is certainly not borne out by epigraphic or numismatic evidences.
3. The jain accounts do not mention Kanishka. Most probably the shakas in question were the western satraps who ruled in the Malwa-Ujjain region. The satraps qualify to be called as shakas.
4. Dr.Fleet has expressed the opinion that the Shaka era was founded by the satrap ruler 'Nahapana' who is qualified to be called a shaka.
5. Mr.Smith too does not accept Kanishka to be the founder of this era and places him in AD 120.

Having disposed of the idea that Kanishka was the founder of this era, let us look into the traditional belief regarding this shaka era.

The tradition current in our country makes the shatavahana ruler 'Hala'(17^{th} in the list of andhras) who is also called as Shalivahana, the founder of this era. Hence it is also called the 'Shalivahana shakabda'.

A critical study into this tradition is necessary.

No ancient treatise extant call this era as 'Shalivahana shaka' but call it variously as 'shaka kala', 'shaka bhupa kala', 'shakendra kala' etc. Moreover, the inscriptions of the shatavahans are dated only in their regnal years and not in any era – shaka or otherwise. So it is clear that this era was founded by the Shakas(Western Satraps) as evidenced by the Jain accounts and the Puranas.
However later tradition(1200 AD onwards) makes shalivahana the founder of this era.
Again, the popular legends relating to Vikramaditya states that Shalivahana who ruled from Pratishtanapura refused to pay the annual tribute money to Vikramaditya who in turn declared a war and that Shalivahana killed Vikrama in that war.
Though this story is surrounded in a web of myths and legends, there must be a kernel of truth in it.

Shalivahana or Hala is said to have resided at Pratishtanapura(moder Paithan). That the shatavahanas ruled from the same city is proved by inscriptional evidence. Hence the Hala Shalivahana must be the king Hala of the Shatavahanas.

From the epigraph of Gautamiputra Shatakarni we come to know that their line had been reduced to state of vassals for quite sometime and that it was Gautamiputra who changed that. So it is historically correct to say that Hala might have been in such a state too.

Combining the legend and these facts we can conclude that Vikramaditya of BC 57 who is said to have ruled for 60 long years, could have reduced the Shatavahanas to that plight and that Hala, refused to pay vassalage, co-operated with the Shaka invasion and played a part in the defeat of Vikramaditya's descendants. Still the short reigns of Hala and his immediate successor (5 years each) show that the position did not improve much after this event and it was left to Gautamiputra to finish the job.

This is just a conjecture to explain such a strong tradition and it has to be put to test. Assuming Hala's reign began in AD 78 (the year of the Shaka era), the respective reign periods of his predecessors and successors have been worked out by me. The same is given in column 'C' in Table IV of this chapter.

We can at once see that the requirements of the 2 inscriptions – of Kharavela & Rudradaman are satisfied thus:

a. The contemporary of Kharavela of Kalinga is Shatakarni I (BC 170-160) and
b. The contemporary of Rudradaman is Gautamiputra Shatakarni (AD139-163)

Thus two rulers with the name Shatakarni were contemporaneous with Kharavela and Rudradaman (Gautamiputra is merely a title meaning 'son of Gautami') as the inscriptions state.

From inscriptions at Nasik & Karle, it is known that Gautamiputra's victorious war took place in the 18th year of his reign. This comes to AD 157(AD 139+18) ie., seven years after Rudradaman's inscription of AD 150. So it can be concluded that Rudradaman died a little before AD 157 and Gautamiputra seized that opportunity to wipe away his shame of having been defeated by Rudradaman twice. 'Vashishtaputra Shatakarni' who married Rudradaman's daughter must be the brother of Vashishtaputra Pulumayi (24th king) who succeeded Gautamiputra.

Coming to the question of Nahapana, the satrap ruler,it has been proposed that he founded the shaka era of AD 78. I think so too but do not agree that his inscriptions dated years 41 to 46 are reckoned in the Shaka era. Whereas in the earlier inscriptions he is styled a 'Kshatrapa' in the 46th year inscription he is called a 'Mahakshatrapa'. Assuming this year to be the year of his victory over the Gardabhillas (ie) AD 78, then these inscriptions would be dated from :

AD78 – 46 = AD 32 !!
This is the year of the 'ananda vikrama era'[AD 32-33] mentioned by the poet Chand and referred to elsewhere.

Thus, it must be the ananda vikrama era which he followed till it's 46th year or AD78 and in that year he must have invaded Ujjain and defeated a descendant of Vikramaditya and assumed the title 'Mahakshatrapa'.

It has already been opined that Nahapana-Gautamiputra synchronization is untenable on numismatic and scriptal grounds and also that about a century must be allowed between Nahapana and Rudradaman. The chronology adopted here agrees with this view and the 'khaharata' defeated by Gautamiputra must be a descendant of Nahapana and not Nahapana himself.

To summarize,

1. Early sakas defeated Gardabhilla – father of Vikramaditya in about BC 74;
2. Vikramaditya drove them away and occupied Ujjain in BC 57;
3. About AD 32-33, the satraps started to re-assert themselves;
4. This was completed by Nahapana who annexed Ujjain in AD 78 (AD 32+46) and became a 'Mahakshatrapa'.

Thus, the dates of the Shatavahanas offered here are in consonance with inscriptional records.

Also, the originator of this line, Simuka, is placed in BC 203 which date is sufficiently later than Ashoka's time and hence is more plausible than Chronology 'B' too.

On these counts, and the fact that tradition regards Hala Shalivahana to be the founder of the shaka era, I think I am justified in accepting these dates as the most probable ones.
[I want to repeat here that Hala could not have founded the era as the tradition claims but at least he must have lived around that time which fact is borne out by the above evidence].

A couple of clarifications:

1. The shatavahana king mentioned in the Jain story of Kalakacharya to be his contemporary cannot be Hala shalivahana. This is because Hala refers to Vikrama's exploits in his prakrit work 'Gathasaptashati' and hence an allowance of about a century must be given between Vikramaditya and Hala. Therefore giving Hala AD 78 (135 years from BC 57) is appropriate. As per the chronology advanced by me, the king at Prathishtanapura at the time of Kalakacharya and Gardabhilla would be 'Shatakarni II', the 6th ruler of the Andhra line.
2. Though Hala Shalivahana ruled only for a short duration, he is a renowned patron of learning. As noted above, he himself was the author of the Prakrit work 'Gathasaptashati'. Prakrit poet Gunadhya who wrote the famous 'Brhatkatha' is traditionally believed to belong to his court. Also in his court was Sarvavarman who produced the 'Katantra' school of Sanskrit grammar.
3. The 10th king Swati must be the king who killed the last of the Kanvas – Susharma, wrongly attributed to Simuka(1st king) in the puranas.

Confirmation:

As per the dates adopted here, the Shatavahana rule ended in AD 253.

Now, the puranas assume that the Saptarishi cycle(of 2700 years) completed one revolution at the end of the shatavahana rule from the time of King Parikshit/Kaliyuga [saptavimshai: shatair bhAvyA andhrAntAs te tadA puna: - VayuP].

AD 253 – 2700 = BC 2447.

This is very close to the date BC 2449.

Here we have the reason why the epoch of BC 1449 was put back a thousand years to BC 2449 (Refer chapter VII).

Since the later puranic astronomers considered that one revolution of the constellation ended in about AD 253, the beginning of the Kali epoch had to be necessarily 2700 years earlier (i.e.) BC 2447. That is why the actual date of BC 1449 was put back a thousand years (998 rounded off to 1000) – to fit the theory of Saptarshi cycle.

It must be noted that the wrong date of BC 2449 for the Yudhishtira shaka occurs in the Brhatsamhita only in the chapter dealing with the Saptarishi cycle! This is an indirect confirmation of my hypothesis.

This explanation is so simple that it must be true!

Again, such co-incidence in dates shows that the chronology adopted here for the Shatavahanas (ending in AD 253) must be very close to the truth and it is the best offered as yet.

The Imperial Guptas:

Much has been written about the Golden age of the Guptas and I need not add anything more. What words are indeed necessary to glorify the era which produced the like of Mahakavi Kalidasa?

The list of the kings & their reign periods as is generally accepted is given in Appendix I.
I would like to point out to the readers once again that the puranas summarily dismiss the Guptas to be rulers over a small region. Thus it is clear that the rajanukirtan sections of the puranas (except the Bhavishya purana) reached their final stage before the time of Chandra Gupta I(AD 320) who was the first important ruler of that line.

Again, from the description of the solar months, seasons etc in the puranas,it is clear that they were written at a time when the ayanamsa was zero(or nearly so) ie. When the first point of the tropical zodiac coincided with that of the sidereal one. There is a direct evidence to this effect in the Vishnu purana:

"meshAdau ca tulAdau ca maitreya viSuvaT sthita:"
"The equinox is stationed at the beginning of Mesha(0 deg) and Tula (180 deg)."

As per the ayanamsa accepted by the Calendar committee of the Government of India (which is demonstrably accurate), the year of zero ayanamsa is AD 285.

This also goes to prove that the puranas, though their kernel stories and genealogies are of much earlier and ancient origin, took their present form and number during the period from AD 250 to AD 300.

I hope the detailed appendices which follow are of use to the discerning readers.

प्रसादात् गणनाथस्य शास्त्रं सम्यगिदं कृतम् ।
अधुना रविश्चन्द्रेण मया कालविनिर्णयम् ॥

R.Ravichander
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Appendix I

Mahabharata war commencement : 25th Oct BC 1486(Aryabhatta Kali 1617),Saturday,JD 1178959,KD 590493,Amavasya in Vrishchika rashi with Rahu very close in the same rashi at 6:00AM,Moon joins Jyeshta star later that day.

Bhishma Siddhi : 2nd Jan BC 1485(Aryabhatta Kali 1617),Friday,JD 1179028,KD 590562,Sayana Uttarayana day,69th day from the commencement of the war ,Magha masa,tribhaga shesha shukla paksha = dashami.

Actual Krishna Siddhi Kali yuga : 36th year after the war, BC 1449(Aryabhatta kali year 1653). On hearing of Krishna's demise,Yudhishtira abdicated his throne,crowned Parikshit & together with the other Pandava & Draupadi, left for the Himalayas and passed away shortly after that.

Kaliyuga Rajavamshas as per Vayu,Vishnu,Bhagavata & Matsya puranas

Mahabharata yuddha took place in the year 1486 BC = Yudhishtira shaka. The pandavas ruled for 36 years till BC 1449 = Actual Kaliyuga = (apara)Yudhishtira shaka.

S.No	Vamsha Particulars	No of years	From (BC)	To (BC)
A	**Barhadrathas (22 kings)**	**937**	**1449**	**512**
1	Somadhi	58	1449	1391
2	Shrutashrava	64	1391	1327
3	Ayutaayus	26	1327	1301
4	Niramitra	40	1301	1261
5	Sukruta	56	1261	1205
6	Brihatkarma	23	1205	1182
7	Senajit (Contemporary of Gonanda III of Kashmir)	23	**1182**	1159
8	Shrutanjaya	40	1159	1119
9	Mahabaahu	35	1119	1084
10	Shuchi	58	1084	1026
11	Kshemya	28	1026	998
12	Bhuvata	64	998	934
13	Dharma netra	5	934	929
14	Nrupati	58	929	871
15	Suvrata	38	871	833
16	Drudha sena	58	833	775
17	Sumati	33	775	742
18	Suchela	22	742	720
19	Sunetra	40	720	680
20	Satyajit	83	680	597
21	Virajit	35	597	562
22	Ripunjaya(Arinjaya)	50	562	512
B	**Sunikas (4 Kings) – Haryanga kula**	**124**	**512**	**388**
1a	Srenika Bimbisara[Reign = 28(puranic)+24 =52(buddhist)]	28	512	484
1b	Bimbisara at Rajagriha & Ajatashatru at Champa	24	484	460
2	Kunika Ajatashatru	32	460	428
3	Darshaka	24	428	404
4	Udayi (Built Pataliputra in his 4th year - BC 400)	16	404	388
C	**Shishunagas (4 kings)**	**54**	**388**	**334**
1	Shishunaga	18	388	370
2	Kakavarna	28	370	342
3	Kshema varma & Kshatraujas	8	342	334
D	**Nandas (9 kings)**	**22**	**334**	**312**

E	**Mauryas (10 kings)**	**137**	**312**	**175**
1	Chandragupta maurya	24	312	288
2	Bindusara(Bhadrasara)	25	288	263
3	Ashoka vardhana	36	**263**	**227**
4	Kunala(Suyashas)	8	227	219
5	Bandhupalita(Dasharata)	8	219	211
6	Indrapalita(Samyuta/Sangata/Samprati)	10	211	201
7	Shalishuka	4	201	197
8	Devavarma(Somasharma)	7	197	190
9	Shatadhara(Shatadhanva)	8	190	182
10	Bruhadratha(Bruhadashva)	7	182	175
F	**Shungas (10 kings)**	**112**	**175**	**63**
1	Pushyamitra Shunga - Performed 2 Ashwamedha Yagnas	36	175	139
2	Agnimitra (Mentioned by Kalidasa's play)	8	139	131
3	Vasumitra	10	131	121
4	Sujyeshta	7	121	114
5	Bhadraka	2	114	112
6	Pulindaka	3	112	109
7	Ghosha	3	109	106
8	Vajramitra	1	106	105
9	Bhagawata	32	105	73
10	Devabhuti	10	73	63
G	**Kanvas (4 kings)**	**45**	**63**	**18**
1	Vasudeva Kanva	?	63	
2	Bhumi mitra	?		
3	Narayana	?		
4	Susharma	?		18
H	**Gardabhillas (10 kings)**			
1	Gardabhilla	?	?	74
	Interim Shaka rule	17	74	57
2	**Vikramaditya** (Started the Vikrama Samvat)	60	**BC 57**	**AD 3**
3	8 Descendants (Defeated by Saka Nahapana & Hala)	75	3	78
I	**Andhra Satavahanas (30 kings)(Taking Hala = 78AD)**	**456**	**BC 203**	**AD 253**
1	Simuka\Sindhuka	23	203	180
2	Krishna	10	180	170
3	(Malla)Shatakarni I	10	170	160
4	Purnotsanga	18	160	142
5	Skandastambi	18	142	124
6	(Shri)Shatakarni II	56	124	68
7	Lambodara	18	68	50
8	Apilaka	12	50	38
9	Meghaswati	18	38	20
10	Swati	18	20	2
11	Skandaswati	7	**BC 2**	**AD 5**
12	Mrigendra Swatikarna	3	5	8
13	Kuntala Swatikarna	8	8	16
14	Swatikarna	1	16	17
15	Pulumayi I	36	17	53
16	Arishtakarna(Dipakarni)	25	53	78

17	**Hala-Shalivahana (author of Gathasaptashati)**	5	**78**	**83**
18	Mantalaka	5	83	88
19	Purikasena	21	88	109
20	Sundara Shatakarni	1	109	110
21	Chakora Shatakarni	1	110	111
22	Shiva Swati	28	111	139
23	Gautamiputra Shatakarni	24	139	163
24	(Vashishtaputra)Pulumayi II	28	163	191
25	Shivashri Pulumayi	7	191	198
26	Shivaskanda Shatakarni	3	198	201
27	Yagnashri Shatakarni	29	201	230
28	Vijayashri Shatakarni	6	230	236
29	Chandashri Shatakarni	10	236	246
30	Pulumayi III	7	246	253
J	**Guptas (8 kings - Details not given in the puranas)**	**?**	**AD 320**	**AD ?**
1	Chandra Gupta I	7	320	327
2	Samudra Gupta	51	327	378
3	Chandra Gupta II(Vikramaditya)	36	378	414
4	Kumara Gupta I(Mahendraditya)	41	414	455
5	Skanda Gupta(Vikramaditya)	12	455	467
6	Puru Gupta	5	467	472
7	Narasimha Gupta(Baladitya)	?		473?
8	Kumara Gupta II	?	473	476
9	Later Guptas	?	?	?
K	**Harsha Vardhana**		**606**	

Mahavira : 72 years : BC 539 to BC 467
Gautama Buddha : 80 years : BC 532 to BC 452
Adi Shankaracharya : 32 years : AD 788 to AD 820

Appendix II

1. The list of the contemporary kings as given in the Vayu,Vishnu & other puranas is given below in a tabular format. The last king of each line is highlighted in red. The kings contemporary to Buddha & Mahavira have been highlighted by emboldening.

2. The puranas give the detailed dynastic list of chandra,surya & barhadratha vamshas from the beginning of the kaliyuga. In the bharata war Arjuna's son Abhimanyu was killed.After him came 'Parikshit' in the chandra vamsha who was crowned at the commencement of the kaliyuga. Though chandravamsha kings initially resided in Hastinapura,the capital was shifted to 'Kaushambi' by 'Nichakshu' - the 6th king of the kaliyuga due to floods in the ganga. Surya vamsha king Brihadbala - decendent of Rama was killed in the war by Abhimanyu. His son Brhatkshana was crowned at the end of the pandava rule. Sahadeva,son of Jarasandha,was also killed in the war.Jarasandha's family descended from 'Brhadratha' & they ruled Magadha. Hence sahadeva's succesors are called 'Barhadrathas'. At the end of the war, Sahadeva's eldest son 'Meghasandhi' was crowned. After him came came his younger brother 'Somadhi' – the first king of Kaliyuga.

3. The chandra vamsha ruled the Vatsa kingdom with Kaushambi as the capital.The surya vamsha ruled the Kosala kingdom(Capital Saketa = Ayodhya). The barhadrathas ruled the magadha with Girivraja as the capital.Bimbisara shifted it to Rajagriha & later Udayi built Pataliputra & made it the magadhan capital.The Pradyotas ruled the Avanti kingdom with Ujjaini as the capital. All the last rulers of these 4 dynasties were defeated by Shishunaga who started the Shishunaga dynasty in this enlarged magadhan empire.Later, the Nandas conqured Kalinga too which was reconqered later by the Mauryan king Ashoka.

4. The puranas while mentioning the suryavamsha include - Shakya,Shuddhodana & Rahula after Sanjaya(21st) king.Then they give Prasenajit,a comtemporary of Buddha. Probably 'Shakya' was a son of Rananjaya of Kosala but not the eldest who must have been Sanjaya.Shakya's son must have been Shuddhodana-father of Buddha.Prasenajit is supposed to have died at the gates of Ajatashatru's palace. It must be noted that Buddha is called 'aditya/arka bandhu'(Relative of the Sun) showing his Suryavamsha lineage. Ashvagosha in his Buddhacarita confirms the Ikshvaku lineage of Buddha. The shakyas(gana rajya = republic) ruled with kapilavastu as the capital under the patronage of the powerful Kosala kingdom.

5. The names of the predecessors of Pradyota mahasena of avanti (ie) Jayasena & Mahendra varma are taken from the Brhatkatha manjari of Kshemendra.

6. The 24^{th} king of the Chandra vamsha is Udayana, the hero of countless legends mentiond in Brhatkatha,Bhasa's plays Pratigna yaugandharayanam & Swapna vasavadatta and also by Mahakavi Kalidasa in his Meghasandesham. As per the above sources he married 3 princess's & a commoner: 1. Vasavadatta – daughter of Pradyota mahasena, 2. Padmavati – daughter of Magadha king Darshaka's mother's sister, 3. Manavika – daughter of the king of Kosala(Kundaka?) defeated by the Panchala king Aruni and 4. Virachika – daughter of a hermit.

7. During the time of Srenika Bimbisara, the powerful republican state of Vaishali was headed by King Chetaka. He had 3 daughters : 1. Priyakarini – mother of Mahavira, 2. Mrgavati – Wife of Shatanika & mother of Udayana and 3. Shalini – Wife of Srenika Bimbisara.

8. The 7^{th} Barhadratha,Senajit, was allegedly the ruler when Vayu purana was composed. His date of accession was BC 1182,as under. Rajaratangini of Kalhana gives this date as that of Gonanda III of Kashmir & states that 21 rulers of his line ruled Kashmir.

S no	**Chandra Vamsha** (Vatsa)	**Surya Vamsha** (Kosala)	**Surya Vamsha** (Kapilavastu)	**Barhadratha Vamsha** (Magadha)	**Pradyota Vamsha** (Avanti)
1	Parikshit (Abhimanyu's son)	Bruhatkshana(Bruhadbala's son)		Somadhi(Sahadeva's son)	
2	Janamejaya	Urukshaya		Shrutashrava	
3	Shatanika	Vatsavyuha		Ayutaayus	
4	Ashwamedha Datta	Prativyoma		Niramitra	
5	Adhisama Krishna	Divakara		Sukruta	
6	Nichakshu	Sahadeva		Brihatkarma	
7	Ushna	Bruhadashva		Senajit	
8	Vichitraratha	Bhanuratha		Shrutanjaya	
9	Shuchiratha	Prateetashva		Mahabaahu	
10	Dhrutiman	Suprateeka		Shuchi	
11	Sushena	Marudeva		Kshemya	
12	Suneetha	Sunakshatra		Suvrata(Anuvrata)	
13	Trichakshu	Kinnara		Dharma netra	
14	Sukheebala	Antariksha		Nrupati	
15	Pariplava	Suparna		Suvrata	
16	Sunaya	Amitrajit		Drudha sena	
17	Medhavi	Bruhadraja		Sumati	
18	Ripunjaya	Dharmi		Suchela	
19	Mrudu	Krutanjaya		Sunetra	
20	Tigma	Rananjaya		Satyajit	
21	Bruhadratha	Sanjaya (Mahakosala)	Shakya (Brother of Sanjaya)	Virajit	Mahendravarma
22	Vasudana(Sahasranika)	**Prasenajit**	**Shuddhodana**	Ripunjaya(Last barhadratha)	Jayasena
23	(apara) **Shatanika**	**Kshudraka (Bhirudaka)**	**Buddha**	**Srenika Bimbisara** (Son of Sunika)	**Pradyota-ChandaMahasena**
24	**Udayana** (Vasavadatta's husband)	Kundaka	Rahula (became a monk at 10)	**Ajatashatru**	Palaka (Brother of Vasavadatta & Gopalaka)
25	Aheenara (naravahana data)	Suratha		Darshaka	Vishakha yupa
26	Dandapani	Sumitra		Udayi	Ajaka
27	Niramitra				Avanti vardhana
28	Kshemaka				

Appendix III

पुराणान्तर्गतं कलियुगीय राजानुकीर्तनम् ।

१ बार्हद्रथाः - Vayupurana

सन्ग्रामे भारते तस्मिन् सहदेवो निपातितः ।
सोमाधिस्तस्य तनयो राजर्षिः स गिरिव्रजे ॥१ ॥
पञ्चाशतम् तथाष्टौ च समा राज्यमकारयत् ।
श्रुतश्रवाः चतुःषष्टिसमास्तस्य सुतोऽभवत् ॥२ ॥
अयुतायुस्तु षड्विंशं राज्यं वर्षाण्यकारयत् ।
चत्वारिंशत् निरमित्रो समाः भुक्त्वा दिवंगतः ॥३ ॥
पञ्चाशतं समाः षट्च सुकृत्तः प्राप्तवान् महीम् ।
त्रयोविंशं बृहत्कर्मा राज्यं वर्षाण्यकारयत् ॥४ ॥
सेनाजित् साम्प्रतं चापि एतां वै भुज्यते समाः ।
श्रुतञ्जयस्तु वर्षाणि चत्वारिंशत् भविष्यति ॥५ ॥
महाबाहुर्महाबुद्धिर्महाभीमपराक्रमः ।
पञ्चत्रिंशत्तु वर्षाणि महीं पालयिता नृपः ॥६ ॥
अष्टपञ्चाशतं चाब्दान् राज्ये स्थास्यति वै शुचिः ।
अष्टाविंशत्समाः पूर्णो क्षेमो राजा भविष्यति ॥७ ॥
भुवतस्तु चतुःषष्टीराज्यं प्राप्स्यति वीर्यवान् ।
पञ्चवर्षाणि पूर्णानि धर्मनेत्रो भविष्यति ॥८ ॥

भोक्ष्यते नृपतिश्चैव अष्टपञ्चाशतं समाः ।

अष्टात्रिंशत्समा राज्यं सुव्रतस्य भविष्यति ॥९ ॥

चत्वारिंशद्दशाष्टौ च दृढसेनो भविष्यति ।

त्रयस्त्रिंशत्तु वर्षाणि सुमतिः प्राप्स्यते ततः ॥१० ॥

द्वाविंशतिसमा राज्यं सुचेलो भोक्ष्यते ततः ।

चत्वारिंशत्समा राजा सुनेत्रो भोक्ष्यते ततः ॥११ ॥

सत्यजित् पृथिवीराज्यं त्र्यशीतिं भोक्ष्यते समाः ।

प्राप्येमां वीरजिच्चापि पञ्चत्रिंशद्भविष्यति ॥१२ ॥

अरिञ्जयस्तु वर्षाणि पञ्चाशत् प्राप्स्यते महीम् ।

द्वाविंशच्चापि नृपा ह्येते भवितारो बृहद्रथाः ॥१३ ॥

२ सुनिकाः – Vayupurana

बृहद्रथेष्वतीतेषु वीतिहोत्रेष्ववन्तिषु ।

सुनिकः स्वामिनं हत्वा पुत्रं समभिषेक्ष्यति ॥१ ॥

अष्टाविंशत्समा राजा विविसारो भविष्यति ।

अजातशत्रुर्भविता पञ्चविंशत्समा नृपः ॥२ ॥

पञ्चविंशत्समा राजा दर्शकस्तु भविष्यति ।
(24 years as per Matsya purana)

उदायी भविता तस्मात्त्रयस्त्रिंशत्समा नृपः ॥३ ॥

स वै पुरवरं राजा पृथिव्यां कुसुमाह्वयम् ।

गंगाया दक्षिणे कूले चतुर्थेऽब्दे करिष्यति ॥४ ॥

२ प्रद्योताः (Contemporaries of Sunikas) -Bhagavata,Vayu puranas

प्रद्योतसंज्ञं राजानम् कर्ता यत् पालकः सुतः।

विशाखयूपस्तत्पुत्रो भविता राजकस्ततः ॥१ ॥

नन्दिवर्धनस्तत्पुत्रः पञ्चप्रद्योतना इमे।

अष्टात्रिंशोत्तरशतं भोक्ष्यन्ति पृथिवीं नृपाः ॥२ ॥

तुल्यकालं भविष्यन्ति सर्व एव महीक्षितः ॥३ ॥

३ शिशुनागाः – Vayu,Vishnu puranas

हत्वातेषां यशः कृत्स्नं शिशुनागो भविष्यति ॥१ ॥

तत्पुत्रः काकवर्णो भविता ।२।

तस्य च पुत्रः क्षेमधर्मा ।३।

तस्यापि क्षत्रौजा ।४।

४ नन्दाः – Vishnu,Vayu puranas

तस्मादपिनन्दिवर्धनः ।१।

ततो महानन्दी ।२।

महानन्दिनस्ततः शूद्रगर्भोद्भवोऽतिलुब्धोऽतिबलो

महापद्मनामा नन्दः परशुराम इवापरोऽखिल

क्षत्रान्कारी भविष्यति ।३।

स चैकच्चत्रामनुल्लङ्घितशासनो महापद्मः पृथिवीं भोक्ष्यते ।४।

तस्याप्यष्टौ सुतास्सुमाल्याद्या भवितारः ॥५॥

५ मौर्याः - Vayu,Bhagavata,Vishnu puranas

उद्धरिष्यति तान् सर्वान् कौटिल्यो वै द्विजोत्तमः।

तेषामभावे जगतीं मौर्या भोक्ष्यन्ति वै कलौ ॥१ ॥

स एव चन्द्रगुप्तं वै द्विजो राज्येऽभिषेक्ष्यति।

चतुर्विंशत्समा राजा चन्द्रगुप्तो भविष्यति ॥२ ॥

भविता भद्रसारस्तु पञ्चविंशत्समा नृपः।

षट् त्रिंशत्तु समा राजा अशोको भविता नृषु ॥३ ॥

तस्य पुत्रः कुनालस्तु(suyashas) वर्षाण्यष्टौ भविष्यति।

कुनालसूनुरष्टौ च भोक्ता वै बन्धुपालितः(dasharatha) ॥४ ॥

बन्धुपालितदायादो दशाब्दानीन्द्रपालितः(samyuta/samprati) ।

ततः शालिशूकः।

भविता सप्तवर्षाणि देववर्मा नराधिपः ॥५ ॥

राजा शतधरश्चाष्टौ तस्य पुत्रो भविष्यति।

बृहद्रथश्च वर्षाणि सप्त वै भविता नृपः ॥६ ॥

एवमेते मौर्या दश भूपतयो भविष्यन्ति अब्दशतं सप्तत्रिंशदुत्तरम् ॥७ ॥

६ शुङ्गाः - Vayu,Matsya puranas

पुष्यमित्रस्तु सेनानीरुद्धृत्य वै बृहद्रथम्।

षट् त्रिंशत् वै समाः राज्यं करिष्यति सदैव तु ॥१ ॥

पुष्यमित्रसुतस्चाष्टौ(agnimitra) भविष्यति समा नृपः।

वसुमित्रः सुतो भाव्यो दशवर्षाणि पार्थिवः ॥२ ॥

भविता चापि तज्ज्येष्टः सप्तवर्षाणि वै ततः ।

ततो धृको(bhadraka) समा द्वे तु भविष्यति सुतश्च वै ॥३ ॥

भविष्यति समास्तस्मात्तिस्त्र एव पुलिन्दकः ।

राजा घोषसुतश्चापि वर्षाणि भविता त्रयः ॥४ ॥

ततो वै वज्रमित्रस्तु समा राजा ततः पुनः ।

द्वात्रिंशद्भविता चापि समा भागवतो नृपः ॥५ ॥

भविष्यति सुतस्तस्य क्षेमभूमिः(devabhuti) समा दश ।

दशैते शुङ्गराजानो भोक्ष्यन्तीमां वसुन्धराम् ।

शतं पूर्णं दश द्वे च तेभ्यः कण्वान् गमिष्यति ॥६ ॥

७ कण्वाः - Vishnu purana

देवभूतिं तु शुङ्गराजानं व्यसनिनं तस्यैवामात्यः

काण्वो वसुदेवनामा तं निहत्य स्वयमवनीं भोक्ष्यति ।१ ।

तस्य पुत्रो भूमित्रस्तस्यापि नारायणः ।२ ।

नारायणात्मजस्सुशर्मा ।३ ।

एते काण्वायनाश्चत्वारः पञ्चचत्वारिंशद्वर्षाणि

भूपतयो भविष्यन्ति ॥४ ॥

८ आन्ध्राः(shatavahanas) - Bhagavata purana

एते त्रिंशन् नृपतयश्चत्वार्यब्दशतानि च ।

षट् पञ्चाशच्च पृथिवीं भोक्ष्यन्ति कुरुनन्दन ॥

(the complete list of the 30 kings & their individual reigns
are available in the Matsya purana)

९ Contemporaries of the Shatavahanas – Vishnu purana

सप्ताभीरप्रभृतयो दश गर्दभिलाश्च

(Gardabhila,Vikramaditya etc) भूभुजो भविष्यन्ति ।१ ।

ततष्षोडश शका भूपतयो भवितारः ॥२ ॥

१० The Great Gap - Bhagavata purana

आरभ्य भवतो (parikshit) जन्म यावन्नन्दाभिषेचनम् ।

एतद् वर्ष सहस्रं तु शतं पञ्चदशोत्तरम् ॥१ ॥

एतद् वर्ष सहस्रं तु शतं पञ्चाशदुत्तरम् (another reading) ॥१ ॥

तेनैत ऋषयो युक्तास्तिष्ठन्त्यब्दशतं नृणाम् ।

ते त्वदिये द्विजाः काले अधुना चाश्रिताः मघाः ॥२ ॥

यदामघाभ्यो यास्यन्ति पूर्वाषाढां महर्षयः ।

तदा नन्दात् प्रभृत्येष कलिर्वृद्धिं गमिष्यति ॥३ ॥

Appendix IV : The Indus valley Civilization - The Sindhukoola Vasis

The end of the Indus valley civilization is put on archeological grounds to be around BC 1500. If the Mahabharata war took place in BC 1486 as suggested by me, there must be some mention of these people in the Mahabharata text itself, is it not?

As a matter of fact there is!

At the time of the Rajasuya yagna of the Pandavas, Nakula is said to have gone on a digvijaya (Tour of Victory), helped by the Matsya desha king, to the western reaches of the Bharata varsha.

These verses occur in this context :

सिन्धुकूलाश्रिता ये च ग्रामणीया महाबलाः ॥

शूद्राभीरगणाश्चैव ये चाश्रित्य सरस्वतीम् ।

वर्तयन्ति च ये मत्स्यैर्ये च पर्वतवासिनः ॥

कृत्स्नं पञ्चनदं चैव तथैवामरपर्वतम् ।

[MB,Sabhaparva,Digvijayaparva,Adhyaya 32,9-11]

Here, Nakula is said to have defeated :

1. The very powerful village confederacy residing on the banks of river Indus;
2. Then, the Shudra-Abhira tribes on the banks of river Saraswati ;
3. Then, he toured the entire Matsya and Pancanada(Punjab) regions.

The first is definitely a reference to the people of the Indus Valley Civilisation. In fact, they are called by that very name – ‘sindhu kUlAshritA’ – Those who reside on the banks of the Indus!

That they were the same as the people of the Indus civilization is shown by the following:

(i) They are styled ‘grAmaNIyA’ – literally Village heads – Village confederacy. This fits well with the Indus civilization. Archeological evidence shows that by BC 1500, this civilization was reduced to agrarian colonies losing much of its earlier splendor. Again, the epithet implies that they did not have a pure monarchic form of government. This also fits with the excavations at the Harappan sites which haven’t revealed any clues about the king, his palace etc as against the royal monuments in the contemporary Egyptian and Babylonian civilizations.

(ii) They are also called ‘mahAbalA:’ – Very Powerful. This further strengthens the view that they were the great civilization of the Indus Valley though probably by that time they were not as powerful as they once were.

(iii) The context & the way they have been referred to leaves one in no doubt that they were not regarded as ‘inhabitants-proper’ of the Bharata Varsha - or to use the modern term ‘Aryans’. Hence the theory that the Harappans were not Aryans is substantiated by the Mahabharata itself! This accounts for the dearth of horse remains or horse seals.

But the point to be noted is that they could not be ‘Dravidians’ either, as the Dravidas have been separately referred to in Sahadeva’s digvijaya to the south where even the Tamil speaking kingdoms of Pandyas,Cholas and Keralas find mention.

This view that they were neither Aryans nor Dravidians has already the support of some historians. This accounts for the difficulty in deciphering their script which was neither Sanskrit based nor Tamil based.

There is strong puranic testimony which can’t be ignored that the kingdoms of Kosala, Pratishtan(Prayaga), Magadha etc were occupied by ‘Aryans’ much before this time (BC 1486)[As per the genealogy given in the puranas ‘Rama’ lived some 30 generations before the time of the Pandavas and he was certainly not one of the earliest of his line!].

So it seems that ‘Aryans’ were original inhabitants of India and they co-existed independently with the Indus civilization from time immemorial. The latter must have never entered the Bharata mainland but lived in its outskirts till about the time of the pandavas. Even Mr.Pargiter suggests that Allahabad(Prayaga) was the starting point of the Aryan migration :
“Indian tradition suggests a reverse origin for the Iranians, which is linguistically tenable, which harmonises with the Boghazkoi treaty and which can account for their language and religion.”
He argues that his theory of Allahabad being the starting point of the Aryan adventure can explain the linguistic facts ‘simply and fully’.

Now, we come to the question of the destruction of this civilization.

Nakula is said to have subdued – not annihilated these people. So we must look elsewhere.

Historians generally identify the ‘Dasyus’ of the Vedas with these peaceful Indus valley people and say that the Aryans destroyed them. But the portrayal of the dasyus therein does not fit very well with the harappans. On the other hand, it fits in just fine with the ‘Abhiras’ who lived near the pancanada region by the river saraswati – mentioned in (2) above. Proof for this claim?

Let us move on to the year BC 1449 – 36th year after the great war. The following incidents are narrated in the 6th Chapter of Mausala parva of the Mahabharata:

Krishna sheds his mortal coil and the city of Dwaraka is completely flooded by the ocean. Arjuna, single handedly escorts the women-folk from Dwaraka to Pancanada(Punjab) region. There the convoy is attacked by 'dasyus' with clubs and sticks and many women are carried away by them. Arjuna is unable to defend the women from this attack and moves on with the balance of women and children.

The points to be noted here are :

(i) The Dasyus are also called 'Abhiras' and 'Mlecchas' in that chapter;
(ii) They attacked in the vicinity of the pancanada region;
(iii) Their description well accords with the dasyus of the Vedas (who are placed in the same region,near the Saraswati river).

From the above it is clear that the 'dasyus' who attacked the Yadava convoy led by Arjuna are none other than the 'Abhiras' mentioned as residing in the banks of river Saraswati in the Pancanada region at the time of Nakula's expedition to the west.

These Abhiras were not the same as the 'Sindhu Koola vasis' as they are separately mentioned in the Sabha parva. It is altogether probable that these dasyus who plundered the Yadavas led by Arjuna in BC 1449, also plundered the Indus valley cities and villages thereby causing their downfall.

To summarise,

(a) The Indus valley citizens were not 'Aryans' nor were they 'Dravidians' but a powerful civilization of some other origin.
(b) The 'Dasyus' were the 'Abhiras' who resided in the Punjab region on the banks of the now extinct river Saraswati.
(c) These dasyus most probably plundered and destroyed the Indus valley civilization.
(d) They also attacked and looted the Yadavas soon after they (Yadavas) were evacuated from Dwaraka due to floods.
(e) All this happened in about BC 1449 – the year of the actual/puranic Kali yuga.

This is a very complex topic to be left for experts and amateur enthusiasts like myself have no say in this matter. Hence I stop here after highlighting the references in the Mahabharata and my conclusions based on them.

Appendix V : Story of the Aryan Civilization

What follows might read like something out of a modern history book but is actually a collection of verses from the Kurma and Vishnu puranas.

Extracts from Chapter 27, Part I of the Kurma purana and Chapter 6, Book I of the Vishnupurana:

The Krta yuga – The First Age:

"kRte tu mithunotpattir vRtti: sAkshAd rasollAsA |
adhamottamatvam nAstyAsAm nirvisheSA: puranjaya ||
yatheccAvAsaniratA: sarvabAdhAvivarjitA: |
tA vai niSkAmacAriNyo nityam muditamAnasA: ||
parvatodadhivAsinyo hyaniketA: parantapa ||"

"In the Krta yuga, people - born of copulation, lived for pleasure. There was no hierarchical distinction among them and they were devoid of any specialization (King,priest etc. In other words there was no Varnashrama distinction). They stayed wherever they pleased and did not have any restrictions. They moved about without desire,always happy in mind (ie., they were always happy as their desires/needs were minimal). **They lived near mountains and water-bodies and had no houses**."

The Treta yuga – The Second Age:

"rasollAsA kAlayogAt tretAkhye nashyate tata: |
prAdurbabhUvus tAsAm tu vRkshAste gRhasamjHnitA: ||
vastrANi te prasUyante phalAnyAbharaNAni ca |
shIta varSA tapais tIvrais tatastA duHkhitA bhRsham ||
dvandvai: sampIdyamAnAstu cakrur AvaraNAni ca |
kRtrimam ca tathA durgam pura kharvatakAdikam ||
gRhANi ca yathA nyAyam teSu cakru: purAdiSU |
vArtopAyam tatas ckarur hastasiddhim ca karmajam ||"

"In the Treta yuga, the pleasure life of the people ended. There arose trees called 'Grha' which gave them clothes,fruits and ornaments (ie., people started using bark of trees, leaves etc as clothing and flowers etc as ornaments). Greatly afflicted by the severity of cold, rain and heat they made enclosures around them - Make-shift citadels (kRtrima durga), towns (pura) and kharvatas (a kharvata is village made up of small huts at the foot of a mountain or at river banks). They built houses as required in those towns etc.

They then fashioned handicrafts-jobs (including cultivation) as means of livelihood."

Note: The Vishnu Purana gives here a list of crops whose cultivation began at that time. The list includes : vrIhaya – Paddy, Yava – Barley and godhUma – Wheat.

“tata: prAdurabhUt AsAm rAgo lobhashca sarvasha: |
tatastA: paryagRhNanta nadI kshetrANi parvatAn ||
vRksha gulmauSadhIshcaiva prasahya tu yathAbalam |
tatastA jagRhu: sarvA anyonyam krodhamUrchitA: ||
vasu dAra dhanAdyAMstu balAt kAlabalena tu |
maryAdAyA: pratiStArtham jHnAtvaitad bhagavAn aja: ||
varnAshrama vyavasthAm ca tretAyAm kRtavAn prabhu: |
yajHna pravartanam caiva pashuhimsA vivarjitam ||
maryAdAm sthApayAmAsa yathA sthAnam yathA guNam |
varNAnAm AshramANAm ca dharmAn dharmabhRtAm vara ||”

“Then, there arose among them – everywhere – wrath and greed. They started establishing control(ownership) over riverbeds, mountains tracks, trees, crops etc according to their strength. Later, all of them, blinded by passion, started to forcibly take away land,spouses, wealth etc of each other.
So, to establish morality/boundaries, ‘Lord Brahma’ created the varnashrama order in the Treta yuga. Performance of Yagnas without animal sacrifices was also started. He(Brahma) established the Varnashrama order based on the position and character (of the people) and he also promulgated laws/rules.”

Note: Thus it was that kings,priests etc came to be. Of course, “Lord Brahma” is unnecessarily included in this passage – but that is after all to be expected in a purana and it does not otherwise,in any way, reduce the historicity/authenticity of the foregoing passages.

The Dvapara yuga – The Third age

Note: Growth of a civilization can be said to be complete when people rise to the level of formulating philosophy. That is explained as under:

“dvApareSvatha vidyante matibhedA: sadA nRNAm |
rAgo lobhas tathA yuddham tatvAnAmavinishcaya: ||
eko Vedas catuSpAdas tretAsviha vidhIyate |
veda vyAsaishcaturdhA tu vyasyate dvAparAdiSu ||
samhitA Rg yaju: sAmnAm samhanyante shrutarSibhi: |
sAmAnyAd vaikRtAccaiva dRStibhedai: kvacit kvacit ||
brAhmaNam kalpasutrANi mantrapravacanAni ca |
itihAsa purANAni dharmashastrANi suvrata ||

avRSTir maraNam caiva tathaiva vyAdhyupadravA: |
vAng mana: kAyajair duHkhair nirvedo jAyate nRNAm ||
nirvedAjjAyate teSAm duHkhamoksha vicAraNA |
vicAraNAcca vairAgyam vairAgyAd doSadarshanam ||
doSANAM darshanAccaiva dvApare jHnAna sambhava: ||”

"In the Dvapara yuga, there will be a lot of difference of opinion among men giving rise to anger, greed and wars.
The one mass of Vedas will be divided into four (Rg,Yajus,Sama and Atharva) in this yuga by Sage Veda Vyasa. The samhitas of Rg, Yajus and Sama Vedas will be compiled by Vedic sages based on the similarity/differences (in the mantras) and personal judgements. The brahmana portion of the Vedas, Kalpasutras, mantra pravacanas, epics - puranas and dharmashastras will also be written/compiled.
Droughts, death, diseases etc will cause misery to the people;
This misery will lead to contemplation on ways to overcome the misery;
Contemplation will lead to 'Vairagyam'(dispassion/asceticism);
'Vairagyam' will lead to 'Dosha darshanam'(realization of faults)'
'Dosha darshanam' will in turn lead to 'Jnanam'(Gnosis) in the Dvapara yuga (This refers to the composition of the Upanishad portions of the Vedas)."

The Kaliyuga – The Fourth age

The Dvapara yuga is said to end with the end of the Pandavas, marking the commencement of the Kali yuga – BC 1449 onwards. This is the threshold of Indian History dealt with in detail in my thesis.

The puranas go on to give extensive dynastic and genealogical details right from the dawn of civilization (Treta yuga onwards).

Comments:

Even a cursory reading of the above puranic account will astonish any historian by it's remarkable consistency and accuracy. The very origin of ownership, society and civilization has been put forth in such a lucid and concise manner so as to put to shame any modern history book.
The historicity of the above account is beyond question and this clearly shows that, shorn of their mythological cloaks, the puranas contain in them very ancient and authentic historical traditions – history more ancient than the Rg veda itself!
The puranas are in post vedic Sanskrit only because they were versified at a later age but the traditions enshrined in them are of high antiquity – handed over from one generation to another – just like the Vedas have been carried down through the ages.

The point that stands out in all this is that there is no mention – not even a suggestion – of any great migration of the Aryans from Central Asia or from the Arctic regions into the Indian sub-continent. When the very origin of civilization has been so accurately preserved, it is impossible to believe that an event of such consequence has been left out/ forgotten.

I'm no proponent of the Hindutva campaign; Yet I feel compelled to quote P. T. Srinivasa Iyengar :

"A careful study of the Vedas...reveals the fact that Vedic culture is so redolent of the Indian soil and of the Indian atmosphere that the idea of the non-Indian origin of that culture is absurd. It is hard to imagine that the Vedic people, who had such a strong bond with their land and constantly praised or deified its mountains and forests and rivers, would not have carried into their culture the least memory of their supposed ancestral steppes away in Central Asia. A strange amnesia for people who cultivated their memory so methodically that they could transmit the four Vedas orally generation after generation to the present day. "

Again F.E.Pargiter, the eminent historian notes that:

"There is a strong presumption in favor of (Indian) tradition; if anyone contests tradition, the burden lies on him to show that it is wrong. Indian tradition knows nothing whatever of the Aryans' invasion of India through the north-west....All this copious tradition was falsely fabricated, and the truth has been absolutely lost; if the current theory is right, is that probable? If all this tradition is false, why, how, and in whose interests was it all fabricated.?"

As a comic relief, I would like to end this write-up with quotes from Swami Vivekananda:

In a lecture in the U.S.A., he remarked scornfully: "And what your European Pandits say about the Aryans swooping down from some foreign lands snatching away the land of aborigines and settling in India by exterminating them, is pure nonsense, foolish talk. Strange that our Indian scholars too say "Amen" to them."

In another lecture, this time in India, he was in a more sarcastic mood but mercilessly to the point: "Our European archaeologist dreams of India being full of dark-eyed aborigines, and the bright Aryans came from - the Lord knows where. According to some they came from Central Tibet, others will have it that they came from Central Asia... Of late, there was an attempt made to prove that the Aryans lived on the Swiss lakes. I should not be sorry if they had been all drowned there, theory and all."

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Transliteration Scheme for Devanagari

अ आ इ ई उ ऊ ऋ ऌ ए ऐ ओ औ अं अः

a A i I u U R L e ai o au am a:

क ख ग घ ङ

k kha ga gha HN

च छ ज झ ञ

c cha ja jha Hn

ट ठ ड ढ ण

T Tha Da Dha N

त थ द ध न

t tha da dha n

प फ ब भ म

p pha ba bha m

य र ल व

y r l v

श ष स ह

sh S s h

क्ष त्र ज्ञ

ksha tra jHn

Note :

a. Wherever an allusion is made to the Brhatkatha(of Gunadhya - Prakrit), either one of its extent versions : 1.The Kathasaritsagara(Sanskrit) of Somadeva or 2. The Perungadai(Tamil) of Konguvelir or 3. The Brhatkatha manjari(Sanskrit) of Kshemendra are referred to.

b. Buddhist chronicles/Ceylonese chronicles refer to the texts Mahavamsa and Dwipavamsa composed by the Buddhist monks of Ceylon apart from the Prakrit canons.

c. Jain records/traditions generally refer to Merutunga's Teravali, Hemachandra's Parishishta parvan and Bhadreshvara's Kathavali apart from the Prakrit canons.

d. The Buddhist canons referred to in Chapter VI are Samagama Suttanta of Majjhima Nikaya and Pasadika Suttanata of Digha Nikaya.